PLEASE SEE SEARCH 20100629-10551698-txt FOR INVENTOR SEARCH

RESULTS FROM SEARCHES IN BIOSIS, BIOTECHNO, BIOTECHDS, DISSABS, EMBASE, ESBIOBASE, LIFESCI, SCISEARCH, AND WPIX

Please see 20100629-10551698-txt for search strategy used in CAPLUS.

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=> d que stat l12
L1   (      2733)SEA L1
L2   (      2733)SEA L1 AND ?IMPLANT?
L3   (      2600)SEA L2 AND (L1 OR ?BIOPOLYMER? OR ?POLYGLYCOLAT? OR ?POLYLACTAT
                 ? OR ?POLYCAPRYOLACTON? OR ?CAPRYOLACTON? OR ?HYALURONAN? OR
                 ?FIBRONECTIN? OR ?CELLULOS? OR ?CHITOSAN? OR ?STARCH? OR
                 ?LACTON? OR ?GALACTON?)
L4   (       482)SEA L3 AND (?SHEATH? OR ?ENGAG?(6A) ?MATRIX? OR ?ATTACH? OR
                 ?ATTACH?(W) ?REGION? OR ?ENGAGE? OR ((CO-AXIAL? OR ?COAXIAL?)(W
                 ) ?MOVEMENT)(5A)(?PREVENT? OR ?LESSEN? OR ?REMOV? OR ?CONTROL?
                 OR ?LIMIT?))
L5   (       254)SEA L4 AND (PRD<20030403 OR PD<20030403)
L6   (         2)SEA L5 AND ?SHEATH?(5A)(?MATRIX? OR ?ATTACH? OR ?MOVE? OR
                 ?CORE?)
L7   (       254)SEA L5 OR L6
L8   (       245)SEA L7 AND ?TISSUE?(4A)(?GROW? OR ?INCREAS? OR ?DEVELOP? OR
                 ?PRODUC?)
L9   (       235)SEA L8 AND (?POLYMER?(W) ?MATRIX? OR ?CELL?(6A) ?POSITION? OR
                 ?GUIDE? OR ?ATTACH? OR ?TENS? OR ?MECHANICAL?(W) ?TENSION? OR
                 ?CORE? OR ?BETWEEN?(4A) ?REGION?)
L10  (        65)SEA L9 AND (?GENERAT? OR ?DAMAG?)(4A)(?NERV? OR ?TISSUE?)
L11  (       235)SEA L9 OR L10
L12          177 SEA L11 AND (CELL? OR ?BLAST? OR ?CYTE? OR ?SECRET? OR ?GLAND?
                 OR ?VESSEL? OR ?EPITHELIAL? OR ?ENDOTHELIAL? OR ?SHEATH?(6A)(?B
                 IOSORB? OR ?POROUS?) OR ?HOLE? OR ?OPEN? OR ?LIQUID?(4A)
                 ?MATRIX? OR ?NERVE?)


=> d ibib abs l12 1-177

L12  ANSWER 1 OF 177  BIOSIS  COPYRIGHT (c) 2010 The Thomson Corporation  on
     STN
ACCESSION NUMBER:    2003:105819  BIOSIS  Full-text
DOCUMENT NUMBER:     PREV200300105819
TITLE:               Perfusion lead and method of use.
AUTHOR(S):           Clemens, William W. [Inventor, Reprint Author]; Hess,
                     Douglas N. [Inventor]; Sommer, John L. [Inventor]
CORPORATE SOURCE:    Fridley, MN, USA
                     ASSIGNEE: Medtronic, Inc.
PATENT INFORMATION:  US 6510348 20030121
SOURCE:              Official Gazette of the United States Patent and Trademark
                     Office Patents, (Jan 21 2003) Vol. 1266, No. 3.
                     http://www.uspto.gov/web/menu/patdata.html. e-file.
                     ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE:       Patent
LANGUAGE:            English
ENTRY DATE:          Entered STN: 19 Feb 2003
                     Last Updated on STN: 19 Feb 2003
AB   A medical electrical lead including an inflatable member at a distal tip
     section, and a system of use, are disclosed.  The inflation member is adapted
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to engage the walls of a cardiac vein or coronary artery to occlude the vessel. According to one aspect of the invention, the inflation member is formed of a bio-absorbable material. In another embodiment, the inflation member is a micro-porous material. The lead of the current invention may include a port located distal to the inflation member to deliver radiopaque dye or any other substance to a vessel when the inflation member is in the inflated state. This allows a fluoroscopic image of a patient's vascular system to be obtained while the lead is in place within a vessel . A perfusion lumen may be provided to allow a partial flow of blood to continue around the inflation member when the inflation member is occluding a vessel. In one embodiment, lead is provided with a lumen for receiving a stiffening member such as a stylet to aid in lead placement. According to one method of using the current invention, inflation member may be inflated after the lead is placed at a desired implant site to provide a temporary fixation mechanism during withdrawal of the stiffening member and/or a guide catheter or sheath used to place the lead at the implant site. This temporary fixation mechanism may also be employed to retain a desired lead location while thresholds are obtains. The inflation member may be retained in an inflated state for a longer predetermined period of time until tissue in-growth begins to occur around the lead.

L12 ANSWER 2 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:376042 BIOSIS Full-text
DOCUMENT NUMBER: PREV200200376042
TITLE: Three-dimensional macroporous calcium phosphate bioceramics with nested chitosan sponges for load-bearing bone implants.
AUTHOR(S): Zhang, Yong; Zhang, Miqin [Reprint author]
CORPORATE SOURCE: Department of Materials Science and Engineering, University of Washington, 302L Roberts Hall, Seattle, WA, 98195-2120, USA
mzhang@u.washington.edu
SOURCE: Journal of Biomedical Materials Research, (July, 2002) Vol. 61, No. 1, pp. 1-8. print.
CODEN: JBMRBG. ISSN: 0021-9304.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Jul 2002
Last Updated on STN: 10 Jul 2002

AB Three-dimensional macroporous calcium phosphate bioceramics embedded with porous chitosan sponges were synthesized to produce composite scaffolds with high mechanical strength and a large surface/volume ratio for load-bearing bone repairing and substitutes. The macroporous calcium phosphate bioceramics with pore diameters of 300 mum to 600 mum were developed using a porogen burnout technique, and the chitosan sponges were formed inside the pores of the bioceramics by first introducing chiosan solution into the pores followed by a freeze-drying process. Our scanning electron microscopy results showed that the pore size of chitosan sponges formed inside the macroporous structure of bioceramics was approximately 100 mum, a structure favorable for bone tissue in-growth. The compressive modulus and yield stress of the composite scaffolds were both greatly improved in comparison with that of HA/beta-TCP scaffolds. The simulated body fluid (SBF) and cell culture experiments were conducted to assess the bioactivity and biocompatibility of the scaffolds. In the SBF tests, a layer of randomly oriented needle-like apatite crystals formed on the scaffold surface after sample immersion in SBF, which suggested that the composite material has good bioactivity. The cell culture experiments showed that MG63 osteoblast cells attached to the composite

scaffolds, proliferated on the scaffold surface, and migrated onto the pore walls, indicating good cell biocompatibility of the scaffold. The cell differentiation on the composite scaffolds was evaluated by alkaline phosphatase (ALP) assay. Compared with the control in tissue culture dishes, the cells had almost the same ALP activity on the composite scaffolds during the first 11 days of culture.

L12 ANSWER 3 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:124240 BIOSIS Full-text
DOCUMENT NUMBER: PREV200100124240
TITLE: Novel synthetic selectively degradable vascular prostheses: A preliminary implantation study.
AUTHOR(S): Izhar, Uzi; Schwalb, Herzl; Borman, Joseph B.; Hellener, Gunnar R.; Hotoveli-Salomon, Anna; Marom, Gad; Stern, Theodor; Cohn, Daniel [Reprint author]
CORPORATE SOURCE: Casali Institute of Applied Chemistry, The Hebrew University of Jerusalem, Jerusalem, 91904, Israel
SOURCE: Journal of Surgical Research, (February, 2001) Vol. 95, No. 2, pp. 152-160. print. CODEN: JSGRA2. ISSN: 0022-4804.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Mar 2001
Last Updated on STN: 15 Feb 2002

AB Background. Vascular grafts perform less well than autologous arterial or vein grafts. The purpose of this study was to evaluate the short-term performance of selectively biodegradable filament-wound vascular prostheses, comprising elastomeric poly(ether urethane) (Lycra) scaffolds and flexible, hydrophilic biodegradable coatings. Materials and methods. Two types of selectively biodegradable vascular grafts were manufactured, comprising a filament-wound Lycra scaffold, subsequently coated with a biodegradable poly(ethylene glycol)/poly(lactic acid) (PELA) block copolymer. The two types of grafts differed in both the overall porosity of the scaffold and the hydrophilicity of the biodegradable constituent. A 60-mm-long and 6-mm-diameter filament-wound and polytetrafluoroethylene (ePTFE) grafts were implanted as interposition prostheses, randomly, at the right- and left-side carotid arteries. Results. Implantation studies proved the grafts to be patent and pulsatile for periods of up to 3 months. Increasing the scaffold porosity and enhancing the hydrophilicity of the biodegradable component improved both the transmural tissue ingrowth process and the vascularization of the prosthesis wall. Also, a well-adhered peripheral tissue and a thin, uniform intima and endothelial lining were obtained. All ePTFE graft controls, although patent, were rather stiff and nonpulsatile. A thick pseudointima, poorly attached to the prosthesis inner surface, was observed. The compliance of the wet grafts was significantly higher than in the dry state, stemming mainly from the water-plasticizing effect on the biodegradable component. The grafts explanted after a period of 6 weeks exhibited compliance only slightly lower than that of the wet grafts. After 12 weeks, however, the hoop compliance was 20% lower than that prior to implantation. At 100 mm Hg, for example, the original compliance of the wet graft was 2.5%/100 mm Hg decreasing to 2.0%/100 mm Hg after a 3-month implantation. The compliance reduction with implantation is attributed to the ingrowth of the perigraft tissue as revealed by the histological study. A compliance of 2.0%/100 mm Hg is slightly better than that of a standard PTFE graft with an original compliance of 1.6%/100 mm Hg. Yet it is still an order of magnitude smaller than that of a canine carotid artery. Conclusions. The improved mechanical properties and enhanced healing of the highly porous filament-wound

Lycra scaffold graft coated with hydrophilic biodegradable PELA has the potential of being a highly effective small caliber prosthetic graft.

L12 ANSWER 4 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 2000:497979 BIOSIS Full-text
DOCUMENT NUMBER: PREV200000498100
TITLE: Fibrous tissue ingrowth and attachment to porous tantalum.
AUTHOR(S): Hacking, S. A. [Reprint author]; Bobyn, J. D.; Toh, K.-K.; Tanzer, M.; Krygier, J. J.
CORPORATE SOURCE: Jo Miller Orthopaedic Research Laboratory, LS1-409, 1650 Cedar Avenue, Montreal, PQ, H3G 1A4, Canada
SOURCE: Journal of Biomedical Materials Research, (December 15, 2000) Vol. 52, No. 4, pp. 631-638. print.
CODEN: JBMRBG. ISSN: 0021-9304.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Nov 2000
Last Updated on STN: 10 Jan 2002

AB This study determined the soft tissue attachment strength and extent of ingrowth to a porous tantalum biomaterial. Eight dorsal subcutaneous implants (in two dogs) were evaluated at 4, 8, and 16 weeks. Upon retrieval, all implants were surrounded completely by adherent soft tissue. Implants were harvested with a tissue flap on the cutaneous aspect and peel tested in a servo-hydraulic tensile test machine at a rate of 5 mm/min. Following testing, implants were dehydrated in a solution of basic fuschin, defatted, embedded in methylmethacrylate, and processed for thin-section histology. At 4, 8, and 16 weeks, the attachment strength to porous tantalum was 61, 71, and 89 g/mm respectively. Histologic analysis showed complete tissue ingrowth throughout the porous tantalum implant. Blood vessels were visible at the interface of and within the porous tantalum material. Tissue maturity and vascularity increased with time. The tissue attachment strength to porous tantalum was three- to six-fold greater than was reported in a similar study with porous beads. This study demonstrated that porous tantalum permits rapid ingrowth of vascularized soft tissue, and attains soft tissue attachment strengths greater than with porous beads.

L12 ANSWER 5 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:202382 BIOSIS Full-text
DOCUMENT NUMBER: PREV199598216682
TITLE: Cellular and bacterial colonisation of barrier membranes utilized for guided bone regeneration around dental implants.
AUTHOR(S): Unsal, E.; Walsh, T. F. [Reprint author]; Harris, D.; Unsal, M. K.; Johns, R. B.
CORPORATE SOURCE: Sch. Clin. Dent., Univ. Sheffield, Claremont Crescent, Sheffield S10 2TA, UK
SOURCE: Cells and Materials, (1994) Vol. 4, No. 3, pp. 309-317.
ISSN: 1051-6794.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 May 1995
Last Updated on STN: 23 May 1995

AB During dental implant surgery, it may not always be possible to ensure that all the coronal threads of the implant are within the bone. To overcome this defect and promote osteogenesis in areas of minimal bone/implant contact and prevent epithelial downgrowth or soft tissue ingrowth, expanded polytetrafluoroethylene (e-PTFE) membranes may be placed over the implants prior to repositioning the mucoperiosteal flap. The purpose of this study was to examine the surface characteristics of one type of e-PTFE membrane using scanning electron microscopy on material retrieved from sites where bone regeneration had been attempted. The membrane was removed between 4 and 7 months following placement. After fixation, the membranes were examined on both the inner (bony) and outer (soft tissue) aspects. No contamination with microbial organisms was seen except into of the seven membranes which became exposed over the healing period. These showed bacterial colonies on both surfaces. In all specimens, a layer of fibrous connective tissue, attached cells, and inflammatory cells were observed. The morphology of the attached cells was similar on the inner and outer aspects of the membranes. Clinically, it was noted that the e-PTFE membrane was effective in promoting bone growth over the implant threads where there was no communication with the oral environment. However, in those sites where the membrane had been exposed to the oral environment, bone growth had not occurred.

L12 ANSWER 6 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1994:14701 BIOSIS Full-text
DOCUMENT NUMBER: PREV199497027701
TITLE: Restricted expression of the hyaluronan, CD44, during postimplantation mouse embryogenesis suggests key roles in tissue formation and patterning.
AUTHOR(S): Wheatley, Susan C. [Reprint author]; Isacke, Clare M.; Crossley, Philip H.
CORPORATE SOURCE: Dep. Anat., Dev. Biol. Prog., Sch. Med., Univ. Calif. San Francisco, San Francisco, CA 94143, USA
SOURCE: Development (Cambridge), (1993) Vol. 119, No. 2, pp. 295-306.
CODEN: DEVPED. ISSN: 0950-1991.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 25 Jan 1994
Last Updated on STN: 26 Jan 1994

AB CD44 is a multifunctional adhesion protein that acts as a major receptor for the hygroscopic extracellular matrix component, hyaluronan. This receptor-ligand binding directly mediates at least some of the cell-cell and cell-matrix interactions ascribed to CD44. Other interactions involving CD44 may be modulated indirectly by its ability to bind growth factors and thereby to promote cell attachment. During vertebrate development, multiple cases of hyaluronan involvement in cell proliferation, cell migration and histogenesis have been documented. In addition, there is evidence suggesting a central role for cell surface glycoproteins and proteoglycans in mediating the action of polypeptide growth factors involved in tissue patterning. In view of this, we undertook to investigate expression of the CD44 protein during postimplantation mouse embryogenesis. Between 9.5 and 12.5 days of embryonic development, the predominant form of CD44 protein corresponds to the hyaluronan -binding CD44H form. However, species with a higher M-r were also detected, implying that CD44 isoforms generated by alternative splicing of CD44 RNA are employed in normal development. Further, we used mouse embryos to perform whole-mount immunohistochemistry and examine the temporal and spatial distribution of this glycoprotein. CD44 is expressed at high levels in the heart, somites and condensing limb-bud mesenchyme at critical stages of

morphogenesis. These sites correlate with regions where hyaluronan has been demonstrated to regulate morphogenetic events. Of novel interest, however, is the high expression of CD44 in regions that do not correlate with sites of known hyaluronan-mediated developmental events. These include instructive epithelia participating in epithelial-mesenchymal cell interactions such as the apical ectodermal ridge of the developing limb bud and the odontogenic placodes of the presumptive upper and lower jaws.

L12 ANSWER 7 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1991:88421 BIOSIS Full-text
DOCUMENT NUMBER: PREV199191047311; BA91:47311
TITLE: EXPERIMENTAL MICROVENOUS RECONSTRUCTIONS WITH GORE-TEX POLYTETRAFLUOROETHYLENE PROSTHESES IMPLANTED BY MEANS OF THE SLEEVE ANASTOMOTIC TECHNIQUE.
AUTHOR(S): VAN DER LEI V [Reprint author]; BARTELS H L; DIJK F; SCHAKENRAAD J M; NIEUWENHUIS P; ROBINSON P H
CORPORATE SOURCE: DEP PLASTIC RECONSTRUCTIVE SURGERY, UNIV HOSP, GRONINGEN, OOSTERSINGEL 59, PO BOX 30001, 9700 RB, GRONINGEN, NETH
SOURCE: Microsurgery, (1991) Vol. 12, No. 1, pp. 23-29. ISSN: 0738-1085.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 11 Feb 1991
Last Updated on STN: 12 Feb 1991

AB Polytetrafluoroethylene (PTFE)prostheses (Gore-Tex, ID, 1 mm; length, 5-7 mm; wall thickness, 0.2 mm; fibril length 30 μm, n = 28) were implanted into the rat femoral vein by means of the sleeve anastomotic technique to enhance the patency rate. In the control group, PTFE prostheses (n = 8) were implanted by means of the end-to-end technique. In the expermental group patency and healing of the PTFE progtheses were evaluated at 1 day (n = 4), 1 week (n = 6), 3 weeks (n = 6), and 12 weeks (n = 6) after implantation by means of macroscopic inspection and routine light and scanning electron microscopy. All prostheses, except one at 1 week after implantation, were patent at the time of removal. All of the microvenous prostheses were completely covered by an endothelial layer at 3, 6, and 12 weeks after implantation. Occasionally some smooth muscle-like cells could be found underneath this endothelial layer, but stenosis was never observed at the anastomotic sites. Only scarce tissue ingrowth was observed in the wall of the PTFE prostheses. In the control group, all protheses, except one prosthesis after 3 weeks, were found to be occluded. An occlusive mural thrombus was found firmly attached at the anastomoses at 1 day, and an organized thrombus at 3 weeks after implantation. The patent prosthesis demonstrated complete endothelial healing. These results demonstrate the importance of the sleeve anastomotic technique and the potential of PTFE prostheses as a microvenous conduit when implanted by mean of the sleeve anastomotic technique in experimental reconstructive microvascular procedures.

L12 ANSWER 8 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1986:434335 BIOSIS Full-text
DOCUMENT NUMBER: PREV198682100523; BA82:100523
TITLE: FIBRONECTIN AND LAMININ PROMOTE IN-VITRO ATTACHMENT AND OUTGROWTH OF MOUSE BLASTOCYSTS.
AUTHOR(S): ARMANT D R [Reprint author]; KAPLAN H A; LENNARZ W J

CORPORATE SOURCE: DEP BIOCHEMISTRY MOLECULAR BIOL, UNIV TEXAS SYSTEM CANCER CENTER, M D ANDERSON HOSP TUMOR INST, 6723 BERTNER AVE, HOUSTON, TX 77030, USA
SOURCE: Developmental Biology, (1986) Vol. 116, No. 2, pp. 519-523.
CODEN: DEBIAO. ISSN: 0012-1606.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 8 Nov 1986
Last Updated on STN: 8 Nov 1986

AB The process of mammalian implantation has been investigated using an in vitro model system wherein the trophoblast cells of mouse blastocysts attach to and outgrow on tissue culture plates containing a complex medium. We now report that two extracellular matrix glycoproteins, fibronectin and laminin, when individually precoated on tissue culture plates promoted in vitro attachment and outgrowth of mouse blastocysts in serum-free medium. The kinetics of attachment and outgrowth processes in the presence of either of these two proteins were identical to that observed in complex, serum-containing medium. In contrast, plates containing a collagen matrix or pretreated with a variety of other serum proteins or various lectins failed to support in vitro attachment and outgrowth of blastocysts. Because all components of the culture medium are defined and both fibronectin and laminin are known components of the basement membrane of the endometrium, this in vitro system offers considerable advantages over the serum supplemented system to study in vitro implantation.

L12 ANSWER 9 OF 177 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1982:170531 BIOSIS Full-text
DOCUMENT NUMBER: PREV198273030515; BA73:30515
TITLE: THE RELATIONSHIP BETWEEN SOFT TISSUE ATTACHMENT EPITHELIAL DOWNGROWTH AND SURFACE POROSITY.
AUTHOR(S): SQUIER C A [Reprint author]; COLLINS P
CORPORATE SOURCE: COLL DENT, UNIV IOWA, IOWA CITY, IOWA, 52242, USA
SOURCE: Journal of Periodontal Research, (1981) Vol. 16, No. 4, pp. 434-440.
CODEN: JPDRAY. ISSN: 0022-3484.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Millipore filters with pore sizes ranging from 0.025 μm-8.0 μm were implanted in the backskin of pigs for periods up to 8 wk. Measurements of the rate of epithelial migration along the filters showed an inverse relationship with pore size although the extent of migration was significantly less along filters with pore sizes of 3 μm and above than along those with smaller pore sizes. Histological examination revealed a difference in the extent of connective tissue infiltration which corresponded to the differences in the rate of migration; filters of pore size 3 μm or more were extensively infiltrated with cell and tissue elements whereas there was little infiltration of filters of 1 μm pore size and none of smaller pore size filters. Three μm is the minimum pore size that permits connective tissue penetration into the filter and that when infiltration does occur the resulting soft tissue attachment markedly restricts the extent of epithelial downgrowth. [The migratory behavior of the oral epithelium is of considerable importance in periodontal disease in which the changing relationship among

epithelium, the underlying connective tissues and the tooth surface is one of the major features of the progressive lesion. Despite this, little is known about epithelial migration and the factors governing soft tissue attachment during the wound healing process following periodontal therapy.] These results support therapeutic attempts to modify the cemental surface and thereby facilitate soft tissue reattachment to the tooth.

L12 ANSWER 10 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2007-18659 BIOTECHDS Full-text
TITLE: New isolated connective tissue growth factor 2 (CTGF-2) polynucleotide and polypeptide, useful for treating skin disorders such as injuries, acne, aging, UV damage, or burns;
useful for a skin injury gene therapy and tissue engineering application
AUTHOR: LI H; ADAMS M D
PATENT ASSIGNEE: HUMAN GENOME SCI INC
PATENT INFO: US 20070154908 5 Jul 2007
APPLICATION INFO: US 2006-563870 28 Nov 2006
PRIORITY INFO: US 2006-563870 28 Nov 2006; WO 1994-US7736 12 Jul 1994
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2007-571015 [55]
AN 2007-18659 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - An isolated polynucleotide selected from: (a) a polynucleotide encoding a polypeptide comprising a 381 amino acid sequence (SEQ ID NO: 2), given in the specification; (b) a polynucleotide encoding the polypeptide comprising amino acids 25-381 of SEQ ID NO: 2; (c) a polynucleotide encoding the polypeptide comprising amino acids 1-351 of SEQ ID NO: 2; (d) a polynucleotide capable of hybridizing to and is at least 70% identical to the polynucleotide of (a) or (b); or (e) a polynucleotide fragment of the polynucleotide of (a), (b), (c), or (d), is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are: (1) a vector containing the DNA; (2) a host cell genetically engineered with the vector; (3) a process for producing the polypeptide; (4) a process for producing cells capable of expressing the polypeptide; (5) a polypeptide selected from: (a) a mature polypeptide having the deduced amino acid sequence of SEQ ID NO. 2 and fragments, analogs, and derivatives; or (b) a mature polypeptide encoded by the cDNA of ATCC Deposit Number 75804 and fragments, analogs, and derivatives of the polypeptide; (6) an antibody that binds to the polypeptide; (7) a method of producing an antibody that binds the polypeptide purified from a cell; (8) a compound, which inhibits activation of the receptor for the polypeptide or which activates the receptor for the polypeptide; (9) a method for the treatment of a patient having need of CTGF-2; (10) a method for the treatment of a patient having need to inhibit a CTGF-2 polypeptide; (11) a process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide; (12) a diagnostic process comprising analyzing for the presence of the polypeptide in a sample derived from a host; and (13) a method for identifying agonist or antagonist compounds to the polypeptide.
BIOTECHNOLOGY - Preferred Polynucleotide: The polynucleotide is DNA. The polynucleotide is also selected from: (a) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit Number 75804; (b) a polynucleotide which encodes a polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit Number 75804; (c) a polynucleotide capable of hybridizing to and

which is at least 70% identical to the polynucleotide of (a); or (d) a polynucleotide fragment of the polynucleotide of (a), (b), or (c). The polynucleotide sequence comprises a polynucleotide sequence selected from: (a) a polynucleotide sequence comprising fully defined 1146 bp (SEQ ID NO. 1) from nucleotides 1-1146; or (b) a polynucleotide sequence of SEQ ID NO. 1 from nucleotides 73-1146. Preferred Polypeptide: The polypeptide comprises amino acids 25-381 of SEQ ID NO. 2. Preferred Method: Producing the polypeptide comprises expressing from the host cell and recovering the polypeptide encoded by the DNA. Producing cells capable of expressing the polypeptide comprises genetically engineering cells with the vector. Producing an antibody that binds the polypeptide purified from a cell comprises: (A) introducing the polypeptide into an animal; (B) allowing the animal to generate an antibody that binds the polypeptide; and (C) isolating the antibody from the animal. Treating a patient having need of CTGF-2 comprises administering to the patient an amount of the polypeptide. The polypeptide is administered by providing to the patient DNA encoding the polypeptide and expressing the polypeptide in vivo. Treating a patient having needed to inhibit a CTGF-2 polypeptide comprises administering to the patient an amount of the compound. Diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide comprises determining a mutation in a nucleic acid sequence encoding the polypeptide. Identifying agonist or antagonist compounds to the polypeptide comprises: (A) contacting a cell expressing on the surface of a receptor for the polypeptide, the receptor associated with a second component capable of providing a detectable signal in response to the binding of a compound to the receptor, with an analytically detectable compound under conditions to permit binding to the receptor; and (B) detecting the absence or presence of a signal generated from the interaction of the compound with the receptor.
ACTIVITY - Vulnerary; Antiseborrheic; Dermatological; Nootropic. No biological data given.
MECHANISM OF ACTION - CTGF-2-Agonist; CTGF-2-Antagonist.
USE - The polynucleotide, polypeptide, composition, and methods are useful for diagnosing or treating a patient having need of CTGF-2. CTGF-2 may be used to treat skin disorders such as injuries, acne, aging, UV damage, or burns. It can also be used to improve the cosmetic appearance of the skin, for example, by treating wrinkled skin. The CTGF-2 can also be used to promote the attachment, fixation, and stabilization of tissue implants, e.g. a prosthesis and other implants inserted during reconstructive surgery. It can be used in the healing of external wounds, by promoting growth of epithelial and connective tissues. CTGF-2 may be applied in the area of injured or depleted bones, with regeneration occurring by promoting the growth of connective tissue, bone, and cementum and by stimulating protein and collagen synthesis, which is especially useful for periodontal disease.
ADMINISTRATION - Dosage is 10 micrograms/kg to 8 mg/kg. Administration can be through topical, intravenous, intraperitoneal, intramuscular, subcutaneous, intranasal, or intradermal route. EXAMPLE - No suitable example given.(19 pages)

L12 ANSWER 11 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2007-16757 BIOTECHDS Full-text
TITLE: New isolated transforming growth factor beta-related (TGF-beta-R) nucleic acids and polypeptides, useful for treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, e.g. gastric or duodenal ulcers; involving vector-mediated gene expression in host cell for recombinant transforming growth factor production, and use of the encoding gene for a gene therapy application

AUTHOR: JING S
PATENT ASSIGNEE: AMGEN INC
PATENT INFO: AU 2006203546 7 Sep 2006
APPLICATION INFO: AU 2006-203546 17 Aug 2006
PRIORITY INFO: AU 2006-203546 17 Aug 2006; AU 2001-219947 30 Nov 2001
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable AU
OTHER SOURCE: WPI: 2007-469099 [46]
AN 2007-16757 BIOTECHDS Full-text
AB DERWENT ABSTRACT:

NOVELTY - An isolated nucleic acid molecule comprising (a) a nucleotide sequence comprising fully defined 665 or 810 bp sequences (SEQ ID NO. 1 or 3); (b) a nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666; or (c) a nucleotide sequence encoding a polypeptide comprising fully defined 140 or 195 amino acid sequences (SEQ ID NO. 2 or 4), is new. DETAILED DESCRIPTION - An isolated nucleic acid molecule comprising a nucleotide sequence selected from: (a) the nucleotide sequence comprising SEQ ID NO. 1 or 3; (b) the nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666; (c) a nucleotide sequence encoding the polypeptide comprising SEQ ID NO. 2 or 4; (d) a nucleotide sequence that hybridizes under at least moderately stringent conditions to the complement of the nucleotide sequence of any of (a) - (c); or (e) a nucleotide sequence complementary to the nucleotide sequence of any of (a)-(c), is new. INDEPENDENT CLAIMS are also included for: (1) a vector comprising the nucleic acid molecule; (2) a host cell comprising the vector; (3) a process of producing a TGF-beta-R polypeptide; (4) a polypeptide produced by the process above; (5) a process for determining whether a compound inhibits TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production; (6) an isolated polypeptide comprising an amino acid sequence selected from: (a) the amino acid sequence of SEQ ID NO. 2 or 4; or (b) the amino acid sequence encoded by the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666; (7) a selective binding agent or its fragment that specifically binds the polypeptide; (8) a selective binding agent or its fragment comprising at least one complementarity determining region with specificity for a polypeptide having the amino acid sequence of SEQ ID NO. 2 or 4; (9) a method for treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, condition, or disorder; (10) a selective binding agent produced by immunizing an animal with a polypeptide comprising SEQ ID NO. 2 or 4; (11) a hybridoma that produces a selective binding agent capable of binding the polypeptide; (12) a method of detecting or quantitating the amount of TGF-beta-R polypeptide using the anti-TGF-beta-R antibody or its fragment; (13) a kit for detecting or quantitating the amount of TGF-beta-R polypeptide in a biological sample comprising the selective binding agent; (14) a polypeptide comprising a derivative of the polypeptide above; (15) a viral vector comprising the nucleic acid molecule; (16) a fusion polypeptide comprising the polypeptide fused to a heterologous amino acid sequence; (17) a method of diagnosing a pathological condition or a susceptibility to a pathological condition m a subject; (18) a device comprising: (a) a membrane for implantation; and (b) cells encapsulated within the membrane, where the cells secrete the protein; and the membrane is permeable to the protein and impermeable to materials detrimental to the cells; (19) a method of identifying a compound that binds to a TGF-beta-R polypeptide; (20) a method of modulating levels of a polypeptide in an animal comprising administering to the animal the nucleic acid molecule; (21) a transgenic non-human mammal comprising the nucleic acid molecule; (22) a process for determining whether a compound inhibits TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production comprising exposing a transgenic mammal to the compound, and measuring TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production in the mammal; and (23) an

array of nucleic acid molecules comprising at least one nucleic acid molecule. BIOTECHNOLOGY - Preparation (claimed): Producing a TGF-beta-R polypeptide comprises culturing the host cell under conditions to express the polypeptide, and optionally isolating the polypeptide from the culture. The host cell is a eukaryotic cell or prokaryotic cell. The nucleic acid molecule comprises promoter DNA other than the promoter DNA for the native TGF-beta-R polypeptide operatively linked to the DNA encoding the TGF-beta-R polypeptide. Preferred Nucleic Acid Molecule: The isolated nucleic acid molecule comprises a nucleotide sequence selected from: (a) a nucleotide sequence encoding a polypeptide that is at least 70% identical to the polypeptide of SEQ ID NO. 2 or 4, where the encoded polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (b) a nucleotide sequence encoding an allelic variant or splice variant of the nucleotide sequence of SEQ ID NO. 1 or 3, the nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666, or the nucleotide sequence of (a); (c) a region of the nucleotide sequence of SEQ ID NO. 1 or 3, the nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666, or the nucleotide sequence of (a) or (b) encoding a polypeptide fragment of at least 25 amino acid residues, where the polypeptide fragment has an activity of the encoded polypeptide of SEQ ID NO. 2 or 4, or is antigenic; (d) a region of the nucleotide sequence of SEQ ID NO. 1 or 3, the nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666, or the nucleotide sequence of any of (a) - (c) comprising a fragment of at least 16 nucleotides; (e) a nucleotide sequence that hybridizes under at least moderately stringent conditions to the complement of the nucleotide sequence of any of (a) - (d); or (f) a nucleotide sequence complementary to the nucleotide sequence of any of (a)-(d). It also comprises a nucleotide sequence selected from: (a) a nucleotide sequence encoding a polypeptide of SEQ ID NO. 2 or 4 with at least one conservative amino acid substitution, where the encoded polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (b) a nucleotide sequence encoding a polypeptide of SEQ ID NO. 2 or 4 with at least one amino acid insertion, where the encoded polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (c) a nucleotide sequence encoding a polypeptide of SEQ ID NO. 2 or 4 with at least one amino acid deletion, where the encoded polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (d) a nucleotide sequence encoding a polypeptide of SEQ ID NO. 2 or 4 that has a C- and/or N-terminal truncation, where the encoded polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (e) a nucleotide sequence encoding a polypeptide of SEQ ID NO. 2 or 4 with at least one modification selected from amino acid substitutions, amino acid insertions, amino acid deletions, C-terminal truncation, or N-terminal truncation, where the encoded polypeptide has an activity of the polypeptide of SEQ ID NO. 2; (f) a nucleotide sequence of any of (a) - (e) comprising a fragment of at least 16 nucleotides; (g) a nucleotide sequence that hybridizes under at least moderately stringent conditions to the complement of the nucleotide sequence of any of (a) - (f); or (h) a nucleotide sequence complementary to the nucleotide sequence of any of (a)-(e). The nucleic acid molecule is attached to a solid support. Preferred Polypeptide: The isolated polypeptide comprises an amino acid sequence selected from: (a) an amino acid sequence for an ortholog of SEQ ID NO. 2 or 4; (b) an amino acid sequence that is at least 70% identical to the amino acid sequence of SEQ ID NO. 2 or 4, where the polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (c) a fragment of the amino acid sequence of SEQ ID NO. 2 or 4 comprising at least 25 amino acid residues, where the fragment has an activity of the polypeptide of SEQ ID NO. 2 or 4, or is antigenic; or (d) an amino acid sequence for an allelic variant or splice variant of the amino acid sequence of SEQ ID NO. 2 or 4, the nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666, or the amino acid sequence of (a) or (b). It also comprises an amino acid sequence selected from: (a) the amino acid sequence of SEQ ID NO.

2 or 4 with at least one conservative amino acid substitution, where the polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (b) the amino acid sequence of SEQ ID NO. 2 or 4 with at least one amino acid insertion, where the polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (c) the amino acid sequence of SEQ ID NO. 2 or 4 with at least one amino acid deletion, where the polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; (d) the amino acid sequence of SEQ ID NO. 2 or 4 that has a C- and/or N-terminal truncation, where the polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4; or (e) the amino acid sequence of SEQ ID NO. 2 or 4 with at least one modification selected from amino acid substitutions, amino acid insertions, amino acid deletions, C-terminal truncation, and N-terminal truncation, where the polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4. The polypeptide has an activity of the polypeptide of SEQ ID NO. 2 or 4. In the polypeptide above, the percent identity is determined using a computer program selected from GAP, BLASTP, FASTA, BLASTA, BLASTX, BestFit, and the Smith-Waterman algorithm. Preferably, the heterologous amino acid sequence is an IgG constant domain or its fragment. The polypeptide of (14) is covalently modified with a water-soluble polymer selected from polyethylene glycol, monomethoxypolyethylene glycol, dextran, cellulose, poly-(N-vinyl pyrrolidone) polyethylene glycol, propylene glycol homopolymers, polypropylene oxide/ethylene oxide copolymers, polyoxyethylated polyols, or polyvinyl alcohol. Preferred Method: Determining whether a compound inhibits TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production comprises exposing a cell to the compound and measuring TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production in the cell. Treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, condition, or disorder comprises administering to a patient an amount of a selective binding agent. Alternatively, treating, preventing, or ameliorating a medical condition comprises administering to a patient the polypeptide or the polypeptide encoded by the nucleic acid. Diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising: (a) determining the presence or amount of expression of the polypeptide, or the polypeptide encoded by the nucleic acid molecule; and (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide. Identifying a compound that binds to a TGF-beta-R polypeptide comprises contacting the polypeptide with a compound; and determining the extent of binding of the TGF-beta-R polypeptide to the compound. It further comprises determining the activity of the polypeptide when bound to the compound. Preferred Binding Fragment: The selective binding agent or its fragment specifically binds the polypeptide comprising SEQ ID NO. 2 or 4, or its fragment. The selective binding agent is an antibody or its fragment, a humanized antibody, a human antibody or its fragment, a polyclonal antibody or its fragment, a monoclonal antibody or its fragment, a chimeric antibody or its fragment, a CDR-grafted antibody or its fragment, an anti-idiotypic antibody or its fragment, a variable region fragment, or a Fab or a Fab' fragment. The selective binding agent is bound to a detectable label. It also antagonizes TGF-beta-R polypeptide biological activity. ACTIVITY - Osteopathic; Immunosuppressive; Antiulcer; Gastrointestinal-Gen; Vulnerary; Cytostatic; Antiinfertility. No biological data given.
MECHANISM OF ACTION - TGF-Antagonist-Beta; Gene Therapy.
USE - The nucleic acid, polypeptide, and methods are useful for treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, condition, or disorder. It can be used for preventing or treating degenerative disorders of the cartilage, bone, teeth, or other tissues (such as the kidney or liver); prevent organ rejection in transplantation (as an immune system suppressor); treat gastric or duodenal ulcers; promote wound

healing; treat burns; promote tissue repair; suppress tumor growth (by inhibiting certain anchorage-dependent cells); or treat impaired fertility. ADMINISTRATION - Dosage is 0.1 micrograms/kg - 100 mg/kg. Administration can be through oral, intravenous, intraperitoneal, intracerebral (intraparenchymal), intracerebroventricular, intramuscular, intraocular, intraarterial, intraportal, or intralesional route. EXAMPLE - A partial transcript for isoform 1 of the human transforming growth factor beta-related (TGF-beta-R) gene was derived from a human genomic clone. In order to obtain a full-length human TGF-beta-R cDNA sequence, several PCR primers (amplimers) corresponding to the 5' and 3' ends of the partial transcript were designed for use in PCR amplification of various cDNA libraries. To isolate full-length cDNA sequences for the human TGF-beta-R polypeptide, 5'- and 3'-RACE was performed, 50 ng of either the fetal ovary or fetal skin cDNA libraries, and a touchdown PCR protocol. Reactions were performed at 94degreesC for 2 minutes for one cycle; 94degreesC for 5 seconds, and 72degreesC for 4 minutes for 5 cycles; 94degreesC for 5 seconds and 69degreesC for 4 minutes for 5 cycles; 94degreesC for 5' seconds, and 67degreesC for 4 minutes for 25 cycles; and 72degreesC for 7 minutes for 1 cycle. Following 5'- and 3'-RACE, nested PCR was performed using the Advantage-HiGh Fidelity 2 PCR kit, 10 mul of a 1:50 dilution of the first round 5'- or 3'-RACE amplification products, and an appropriate pair of amplimers, in a volume of 50 mul. For amplification of the 5'-RACE product, the amplimers 2450-22 and 1916-82 were used. For amplification of the 3'-RACE product, the amplimers 2450-21 and 1916-81 were used. Reactions were performed at 94degreesC for 2 minutes for one cycle; 94degreesC for 5 seconds, and 72degreesC for 4 minutes for 5 cycles; 94degreesC for 5 seconds and 70degreesC for 4 minutes for 5 cycles; 94degreesC for 5 seconds and 68degreesC for 4 minutes for 25 cycles; and 72degreesC for 7 minutes for 1 cycle. Following separation on a 1% agarose gel, well-defined PCR products were isolated from the gel, purified using a gel extraction kit and then sequenced. Sequence analysis of the full-length cDNA for isoform 1 of the human TGF-beta-R polypeptide indicated that the isoform 1 gene comprises a 420 bp open reading frame encoding a protein of 140 amino acids. Sequence analysis of the full-length cDNA for isoform 2 of the human TGF-beta-R polypeptide indicated that the isoform 2 gene comprises a 585 bp open reading frame encoding a protein of 195 amino acids.(126 pages)

L12 ANSWER 12 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-10042 BIOTECHDS Full-text
TITLE: Polynucleotides encoding growth factor polypeptides useful for enhancing the repair of connective tissue and support tissue;
recombinant protein production and antagonist and agonist for use in disease therapy and gene therapy
AUTHOR: LI H; ADAMS M D
PATENT ASSIGNEE: HUMAN GENOME SCI INC
PATENT INFO: US 20030078391 24 Apr 2003
APPLICATION INFO: US 2002-294796 15 Nov 2002
PRIORITY INFO: US 2002-294796 15 Nov 2002; WO 1994-7736 12 Jul 1994
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2004-118877 [12]
AN 2004-10042 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - An isolated polynucleotide (I) comprising: (a) a polynucleotide encoding the polypeptide comprising amino acid 1 to 381 of a fully defined 382 amino acid sequence given in the specification (SEQ ID NO:2); (b) a polynucleotide encoding the polypeptide comprising amino acid 25 to 381 of

SEQ ID NO:2 (c) a polynucleotide capable of hybridizing to and which is at least 70% identical to (a) or (b); or (d) a polynucleotide fragment of (a), (b) or (c), is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an isolated polynucleotide (II) comprising a member selected from the group consisting of: (a) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit Number 75804; (b) a polynucleotide which encodes a polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit Number 75804; (c) a polynucleotide capable of hybridizing to and which is at least 70% identical to the polynucleotide of (a); and (d) a polynucleotide fragment of the polynucleotide of (a), (b) or (c); (2) a vector (III) containing (I); (3) a host cell (IV) genetically engineered with (III); (4) producing (M1) a polypeptide comprising expressing from (IV) the polypeptide encoded by (I); (5) producing (M2) cells capable of expressing a polypeptide comprising genetically engineering cells with (III); (6) a polypeptide (V) encoded by (I) comprising: (a) a mature polypeptide having the deduced amino acid sequence of SEQ ID NO:2 and fragments, analogs and derivatives of it; and (b) a mature polypeptide encoded by the cDNA of ATCC Deposit Number 75804 and fragments, analogs and derivatives of the polypeptide. (7) a compound (VI) which inhibits activation of the receptor for (V); (8) a compound (VII) which activates the receptor for (V); (9) treating (M3) a patient having need of connective tissue growth factor-2 (CTGF-2) comprising administering (V); (10) treating (M4) a patient having need to inhibit a CTGF-2 polypeptide comprising administering (VI) (11) diagnosing (M5) a disease or a susceptibility to a disease related to an under-expression of (V) comprising determining a mutation in a nucleic acid sequence encoding (V); (12) a diagnostic process (M6) comprising analyzing for the presence of (V) in a sample derived from a host; and (13) identifying (M7) agonist or antagonist compounds to (V) comprising: (a) contacting a cell expressing a receptor for the polypeptide on its surface, the receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor, with an analytically detectable compound under conditions to permit binding to the receptor; and (b) detecting the absence or presence of a signal generated from the interaction of the compound with the receptor. BIOTECHNOLOGY - Preferred Polynucleotide: (I) is preferably DNA. (I) encodes amino acid 1 to 351 of SEQ ID NO:2. (I) comprises the sequence as set forth in SEQ ID Number 1 from nucleotide 1 to nucleotide 1146. (I) comprises the sequence as set forth in SEQ ID Number 1 from nucleotide 73 to nucleotide 1146. (I) comprises the sequence as set forth in SEQ ID Number 1 from nucleotide 1 to nucleotide 1146. (I) comprises the sequence as set forth in SEQ ID Number 1 from nucleotide 73 to nucleotide 1146 of a fully defined 1146 base pair sequence given in the specification. Preferred Polypeptide: (V) comprises amino acid 25 to amino acid 381 of SEQ ID NO:2. Preferred Method: In (M3) the therapeutically effective amount of the polypeptide is administered by providing to the patient DNA encoding (V) and expressing (V) in vivo. Preparation: (I) is prepared using standardisolation techniques.
ACTIVITY - Vulnerary; Antiseborrheic; Dermatological; Osteopathic. No biological data given.
MECHANISM OF ACTION - Gene Therapy; CTGF-2-Agonist; CTGF-2-Antagonist.
USE - (M1) is useful for preparing (V). (M2) is useful for reparing (IV). (M3) is useful for treating a patient having need of connective tissue growth factor-2 (CTGF-2). (M4) is useful for treating a patient having need to inhibit a CTGF-2 polypeptide. (M5) is useful for diagnosing a disease or a susceptibility to a disease related to an under-expression of (V). (M7) is useful for identifying agonists anfd antagonists of (V) (claimed). (V) are useful for enhancing the repair of connective and support tissue e.g. CTGF-2 may be used to treat skin disorders such as injuries, acne, aging, UV damage

or burns. CTGF-2 may also be used to improve the cosmetic appearance of the skin, for example, by treating wrinkled skin. CTGF-2 may also be employed to promote the attachment, fixation and stabilization of tissue implants, for example, a prosthesis and other implants inserted during reconstructive surgery. (V) may be employed in the healing of external wounds by promoting growth of epithelial and connective tissues and the synthesis of total protein and collagen. CTGF-2 may be applied in the area of injured or depleted bones, with regeneration occurring by promoting the growth of connective tissue , bone and cementum and by stimulating protein and collagen synthesis which is especially useful for periodontal disease. (I) is useful as a diagnostic. (I) is also useful as a hybridization probe. ADMINISTRATION - CTGF-2 is administered may be administered via topical, intravenous, intraperitoneal, intramuscular, subcutaneous, intranasal or intradermal routes. CTGF-2 is administered at 10 microg/kg to 1 mg/kg body weight daily. EXAMPLE - No suitable example given.(19 pages)

L12 ANSWER 13 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-13702 BIOTECHDS Full-text
TITLE: Retinoic acid receptor (RAR) pan-antagonist composition comprising RAR pan-antagonist compounds each of which has high binding affinity to RAR-alpha, RAR-beta and RAR-gamma, useful for increasing chondrogenesis; vector-mediated reporter gene transfer and expression in host cell for drug screening and disease therapy
AUTHOR: UNDERHILL T M; WESTON A D
PATENT ASSIGNEE: UNIV WESTERN ONTARIO
PATENT INFO: WO 2003024473 27 Mar 2003
APPLICATION INFO: WO 2002-CA1421 17 Sep 2002
PRIORITY INFO: US 2001-322874 17 Sep 2001; US 2001-322874 17 Sep 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-313322 [30]
AN 2003-13702 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - Retinoic acid receptor (RAR) pan-antagonist composition (I) chosen from a mixture of one or more RAR pan-antagonist compounds each of which has high binding affinity to RARalpha, RARbeta and RARgamma, a mixture of at least two compounds that each have high binding affinity to one of RARalpha, RARbeta and RARgamma, and mixture of the two mixtures, is new. (I) is administered to cells to inhibit RAR-mediated signaling and/or enhance RAR-mediated repression.
DETAILED DESCRIPTION - A retinoic acid receptor (RAR) pan-antagonist composition (I) chosen from a mixture of one or more RAR pan-antagonist compounds each of which has a high binding affinity to RARalpha, RARbeta and RARgamma, a mixture of at least two compounds that each have a high binding affinity to one or RARalpha, RARbeta and RARgamma, and a mixture of the above components, where (I) additionally comprises a carrier, and is administered to a population of cells to essentially inhibit RAR-mediated signaling and/or enhance RAR-mediated repression leading to increased chondrogenesis.
INDEPENDENT CLAIMS are also included for: (1) producing cartilage at a cartilage defect in vivo, involves implanting into the defect a population of precursor cells of chondrocyte lineage which have been cultured in the presence of (I); and (2) an implantable prosthetic device for repairing an orthopedic defect, injury or anomaly in a vertebrate, comprising a prosthetic implant having a surface region implantable adjacent or within a target tissue, and (I) incorporated on and/or within the prosthetic implant.
BIOTECHNOLOGY - Preferred Composition: (I) additionally comprises an

epidermal growth factor, fibroblast growth factor, platelet derived growth factor, transforming growth factor, parathyroid hormone, leukemia inhibitory factor, insulin-like growth factor, bone morphogenetic protein-2 or 5, osteogenin, sodium fluoride, estrogens, calcitonin, biphosphonates, calcium carbonate, prostaglins, vitamin K and their mixtures. (I) is provided as a solution, suspension, gel, matrix, film, paste, pill, tablet or encapsulated within liposomes, where (I) additionally comprises excipients, preservatives, solubilizers, buffering agents, albumin, lubricants, fillers, stabilizers and their mixtures. (I) is used in conjunction with a device such as implantable mechanical physical device, implantable biodegradable carrier, implantable biodegradable synthetic carrier, implantable prostheses, implantable demineralized allogenic bone or implantable demineralized xenogenic bone. Preferred Method: The implanting is done by intraarticular injection.
ACTIVITY - Antiarthritic.
MECHANISM OF ACTION - Promoter of chondrogenesis of precursor cells of chondrocyte lineage (claimed); RAR-alpha, RAR-beta and RAR-gamma pan-antagonist; Cartilage formation stimulator; Blocks and/or enhances RAR-mediated repression of RAR-alpha, RAR-beta and RAR-gamma; Stimulator of Sox9 expression or activity; Activator of p38 mitogen activated protein kinase (MAPK) and protein kinase A (PKA) pathways. To follow endogenous Sox9 activity in primary mesenchymal cells, a reporter-based approach was used in which cells were transiently transfected with pGL3 (4X48), a reporter containing four repeats of a Sox9 binding site from the first intron of Col2a1. The RARalpha-specific antagonist, AGN194301 (301), induced a concentration-dependent increase in reporter activity, whereas at-RA and the RARalpha-specific agonist, AGN193836 (836), attenuated reporter activity. Cells were treated with the RAR pan-antagonist, AGN194310(310), concentrations as low as 10 nM induced Sox9 reporter activity greater than the maximal response elicited by higher doses of 301. The maximal response to the pan antagonist was 530 % induction at 50 nM, whereas the greatest induction of Sox9 reporter activity by the RARalpha-specific antagonist was 280 % at 1 micro-M, a concentration at which this antagonist affected ligand binding to other RAR subtypes. Similar to RAR antagonism, the reduction in reporter activity caused by pan-agonist such as at-RA (an RAR-alpha agonist) was more pronounced than that induced by the RARalpha-specific agonist, 836. At-RA reduced reporter activity to 53 % at 5 mM, while in response to a much higher dose of 836 (1 micro-M), reporter activity was reduced only to 64 % of control. These results indicated that a loss in activity of all RARs was more efficient at inducing cartilage differentiation than inhibition of the RARalpha subtype alone.
USE - (I) is useful for the manufacture of a medicament for the stimulation of chondrogenesis, and for stimulating chondrogenesis in vivo or in vitro on contact with the precursor cell of chondrocyte lineage. (I) is useful for promoting in vivo integration of an implantable prosthetic device, into a target cartilage tissue of a vertebrate, by providing (I) on a surface of the prosthetic device and implanting the device in a vertebrate at a site, where the target cartilage tissue and surface of the prosthetic device are maintained at least partially in contact for a time sufficient to permit enhanced tissue growth between the target cartilage tissue and the device, and aiding the attachment of implantable prosthesis at cartilageous sites and for maintaining the long term stability of the prostheses in vertebrates by coating selected regions of an implantable prosthesis with (I) and implanting the coated prosthesis into a cartilageous site, where the implantation promotes the formation of new cartilage tissue. (I) is useful for treating, ameliorating or repairing a cartilage-associated degenerative condition (e.g. arthritis, degenerative joint disease), a skeletal defect and/or large segmental skeletal gap and non-union fractures arising from trauma or surgery in a subject. (I) is also useful for ex vivo engineering of chondrocytes, which involves culturing a population of precursor cells of chondrocyte

lineage with (I) for a time sufficient to stimulate chondrogenesis, and implanting the cells directly into a desired site in a subject or applying the cells to a device such as implantable mechanical physical device, implantable biodegradable carrier, implantable biodegradable synthetic carrier, implantable prostheses, implantable demineralized allogenic bone or implantable demineralized xenogenic bone, prior to implantation into a subject. (All claimed.) (I) is useful for treating damaged cartilage and associated bone in a subject, stimulating cartilage repair and formation, and producing cartilage at a cartilage defect site in vivo. (I) is also useful for treating orthopedic or dental implants, to enhance or accelerate osseous integration. In orthopedic industry, (I) has the following applications: trauma repair, spinal fusion, reconstructive surgery, maxillofacial surgery, and dental surgery. (I) is useful in skeletal and cartilage reconstruction.
ADMINISTRATION - (I) is administered locally or systemically, preferably by intra-articular injection. (I) is delivered at the site of skeletal surgery where such delivery promotes the formation of new born tissue. (I) is delivered at the site of segmental skeletal gap or non-union fracture, where such delivery promotes chondrogenesis which mediates the formation of new bone tissue. (All claimed.) No dosage is given.
ADVANTAGE - The compositions are effective in treatment of disorders involving abnormal cartilage formation, and associated abnormal skeletal development resulting from disease or trauma. The ability of (I) to stimulate local natural bone growth provides stability and rapid integration, while the body's normal cell-based bone remodeling process slowly resorbs and replaces a selected implant with a natural bone. Use of (I) eliminates the pain and costs associated with the bone harvest procedure required in autograft transplants. (I) can be made synthetically thus reducing the possibility of transmission of infection and disease, as well as diminishing the likelihood of immunological rejection by the patient. (70 pages)

L12 ANSWER 14 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-07467 BIOTECHDS Full-text
TITLE: Novel isolated human zilla7 proteins, useful for treating or preventing rheumatoid arthritis, psoriasis, septic shock, glomerulonephritis, cerebral ischemia, fracture repair, skin wounds, duodenal ulcers and bone cancers;
recombinant protein production, antibody and its antisense useful for gene therapy and diagnosis
AUTHOR: SHEPPARD P O
PATENT ASSIGNEE: ZYMOGENETICS INC
PATENT INFO: WO 2002085931 31 Oct 2002
APPLICATION INFO: WO 2002-US13041 24 Apr 2002
PRIORITY INFO: US 2001-286481 25 Apr 2001; US 2001-286481 25 Apr 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-093094 [08]
AN 2003-07467 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - An isolated protein (I) comprising a sequence of amino acid residues 32-166 of a fully defined human zilla7 protein (structural homolog of interleukin-1 and fibroblast growth family of cytokines) sequence (S1) of 252 amino acids as given in the specification, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an expression vector (II) comprising the operably linked elements of a transcription promoter, a DNA segment encoding (I), and a transcription terminator; (2) a cultured cell (III) into which has been introduced (II), where the cell expresses the DNA segment; (3) preparation of (I); (4) a

protein (IV) produced according to the above method; (5) an antibody (V) specifically binds to (IV); (6) modulating an immune response in an animal, and modulating the proliferation, differentiation, migration or metabolism of mesencymal cells in an animal, by administering to the animal, a composition comprising (IV) in combination with a vehicle; and (7) modulating the proliferation, differentiation, migration or metabolism of mesencymal cells in culture, by administering a composition comprising (IV) in combination with a vehicle.

WIDER DISCLOSURE - The following are disclosed: (1) fusion proteins comprising (I); (2) polynucleotide sequences encoding (I); (3) DNA sequences that differ from the polynucleotide sequences encoding (I) by degeneracy of genetic code; (4) allelic variants of the polynucleotide encoding (I), as well as proteins which are allelic variants of (S1); and (5) antisense polynucleotides to polynucleotides encoding (I). BIOTECHNOLOGY - Preparation: (I) Is produced by culturing (III) under conditions where the DNA segment is expressed and recovering the protein encoded by the DNA segment. The expression vector further comprises a secretory signal sequence operably linked to the DNA segment, where the protein encoded by the DNA segment is secreted into a culture medium in which the cell is cultured, and where the protein is recovered from the culture medium (claimed). Preferred Protein: (I) comprises a sequence of amino acid residues 32-170, 32-252, 3-166, 3-170, 3-252, 1-166, 1-170 or 1-252 of (S1). The protein is not more than 500-1500 amino acid residues in length. (I) further comprises an affinity tag or an immunoglobulin Fc region. Preferred Vector: (II) further comprises a secretory signal sequence operably linked to the DNA segment.

ACTIVITY - Antirheumatic; Antiarthritic; Osteopathic; Antipsoriatic; Antidiabetic; Antibacterial; Immunosuppressive; Cytostatic; Antiinflammatory; Antiulcer; Nephrotropic; Vasotropic; Vulnerary; Ophthalmological.

MECHANISM OF ACTION - Immune response modulator; Modulator of proliferation, differentiation, migration or metabolism of mesencymal cells (all claimed); Inflammation modulator; IL-1 antagonist; zilla7 antagonist. No supporting data is given.

USE - (III) is useful for preparing (I) by recombinant techniques (claimed). (I) is used to modulate inflammation and related processes, preferably for reducing inflammation and treating autoimmune diseases by acting as IL-1 antagonist. The zilla7 protein is useful for treating or preventing arthritis (rheumatoid arthritis, osteoarthritis, etc), psoriasis; reducing tissue damage after ischemia; treating septic shock, graft-verse host disease, and leukemia. The zilla7 protein is useful for treating Crohn's disease, ulcerative colitis, insulin-dependent diabetes mellitus, acute pancreatitis, glomerular nephritis, and cerebral ischemia. (I) is also useful in: (i) treatment of full thickness wounds including venous stasis ulcers and other chronic, non-healing wounds; (ii) fracture repair, including non-union fractures; (iii) bone grafts; (iv) healing bone following radiation-induced osteonecrosis; (v) implants including joint replacements and dental implants; (vi) repair of bony defects arising from surgery; (vii) treatment of bone defects following therapeutic treatment of bone cancers, (viii) increasing bone formation during distraction osteogenesis; (ix) treatment of joint injuries, including repair of cartilage and ligament; (x) repair of joints that have been afflicted with osteoarthritis; (xi) tendon repair and re-attachment; (xii) treatment of osteoporosis and other conditions characterized by increased bone loss or decreased bone formation; (xiii) elevation of peak bone mass in pre-menopausal women; (xiv) use in the healing of connective tissues associated with duramater; (xv) skin grafting; (xvi) reconstructive surgery to promote neovascularization and increase skin grafting; (xvii) reconstructive surgery to promote neovascularization and increase skin flap survival; (xviii) establishing vascular networks in transplanted cells and tissues; (xix) treating female reproductive tract disorders, including acute or chronic placental insufficiency (an important

factor causing perinatal morbidity and mortality) and prolonged bleeding; (xx) promoting the growth of tissue damaged by periodontal disease and to repair other dental defects; (xxi) promoting the repair of damaged liver tissue; in the acute and chronic lesions of the gastrointestinal tract, including duodenal ulcers; (xxii) promoting angiogenesis and prevent neuronal degeneration due to chronic cerebral ischemia; (xxiii) accelerating the formation of collateral blood vessels in ischemic limbs; (xxiv) promoting vessel repair and development of collateral circulation following myocardial infarction so as to limit ischemic injury; (xxv) to promoting the repair of damaged cardiovascular tissue; to stimulate hematopoiesis; and (xxvi) enhancing T and B-cell function. The polypeptides are also useful as additives in tissue adhesives for promoting revascularization of the healing tissue. zilla7 protein can be used for promoting production of cartilage, as laboratory reagents, and for producing antibodies. Inhibitors of zilla7 protein (zilla7 antagonists such as anti-zilla7 antibodies are useful in the treatment of ocular neovascularization including diabetic retinopathy and age-related macular degeneration. zilla7 antagonists are useful in the treatment of infantile hemangiomas, which exhibit over-expression of growth factors during the proliferative phase, and to limit the growth or metastasis of tumors. The antibodies are also useful for affinity purification of zilla7 proteins, for immunolocalization within whole animals or tissue sections, in diagnostic assays to determine circulating levels of zilla7 protein, etc. ADMINISTRATION - (I) Is administered by local, including topical, or parenteral including intravenous, subcutaneous or intraperitoneal route. Dosages range from 1 ng/ml-1000 micrograms/ml. For local application, such as dermal wound healing, the protein is applied in the range of 0.1-100 micrograms/cm2.
EXAMPLE - No relevant example is given.(70 pages)

L12 ANSWER 15 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-06815 BIOTECHDS Full-text
TITLE: Novel biodegradable conductive polymer useful for transplant engraftment, tissue differentiation and tissue regeneration;
for cell differentiation, tissue engineering and drug delivery
AUTHOR: SCHMIDT C E; RIVERS T J
PATENT ASSIGNEE: UNIV TEXAS SYSTEM; SCHMIDT C E; RIVERS T J
PATENT INFO: WO 2002076288 3 Oct 2002
APPLICATION INFO: WO 2002-US9514 27 Mar 2002
PRIORITY INFO: US 2001-279019 27 Mar 2001; US 2001-279019 27 Mar 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-046745 [04]
AN 2003-06815 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - A biodegradable conductive polymer is new.
DETAILED DESCRIPTION - A biodegradable conductive polymer of formula (1) is new. n and n' = 0-10; R1-R4, Z and Z' = H, alkyl, aryl, halogen, hydroxyl, carboxyl or their salts; X and X' = oxygen or nitrogen atoms that form ester or amido linkages respectively; and Y and Y' = OH or NH2.
INDEPENDENT CLAIMS are included for the following: (1) A chemical compound used for producing the polymer; (2) Preparation of 2,5-bis-(5-(3-hydroxy-propoxy carbonyl)-2-pyrrolyl)thiophene (HPCPT). 2,5-bis(5-(hydroxycarbonyl)-2-pyrrolyl)thiophene (obtained from 2,5-bis(5-(methoxycarbonyl)-2-pyrrolyl)thiophene obtained by sequential conversion of pyrrole to 2-(trichloroacetyl)pyrrole, 2-(trichloroacetyl)pyrrole to methyl pyrrole-2-

carboxylate, methyl pyrrole-2-carboxylate to methyl 5-formylpyrrole-2-carboxylate, methyl 5-formylpyrrole-2-carboxylate to 1,4-bis(5-(methoxycarbonyl)-2-pyrrolyl)- 1,4-butanedione, and 1,4-bis(5-(methoxycarbonyl)-2-pyrrolyl)-1,4- butanedione to 2,5-bis(5-(methoxycarbonyl)-2-pyrrolyl)thiophene) is converted to HPCPT; (3) Production of biodegradable electrically conductive polymer of formula (8).2,5-bis-(5-(3-hydroxy-propoxy carbonyl)-2-pyrrolyl)thiophene is converted to the polymer by reacting with diacid chloride; and (4) Stimulation of cell response. The polymer contacts one or more cells and applied with electric current and voltage, to stimulate the cells such that the cells are not harmed.
USE - For biodegradable electrically conducting polymer used for tissue engineering such as transplant engraftment, tissue regeneration, tissue repair, tissue reconstruction, tissue growth, tissue differentiation, limb reattachment, limb reconstruction, immunogenic response, and/or cognitive function (claimed).
ADVANTAGE - The biodegradable electrically conductive polymer has processable, and biodegradable and bioactive features. The polymer has beneficial functions such as regenerative, restorative, reconstructive, therapeutic, prophylactic and diagnostic. The scaffolds prepared using the polymer, are bioactive. EXAMPLE - A novel polymer (60% yield) was obtained by condensation of 2,5-bis-(5-(3-hydroxy-propoxy carbonyl)-2-pyrrolyl)thiophene with adipoyl chloride in refluxing pyridine under argon. The purified polymer was soluble in tetrahydrofuran, and had a molecular weight of 8400 and poly dispersity index of 3. The polymer undergoes irreversible oxidation at 0.96 V and 1.20 V after first scanning by cyclic voltammetry. Conductivity measurement of the polymer indicated that current can be passed through the polymer when doped with iodine vapor. Biocompatibility of the polymer was tested with human neuroblastoma cells. Cells were seeded onto a thin polymer film. Cells attached to the polymer surface expressed nerve-like phenotype by extending neurites. Attachment of the polymer was analyzed after 1 day and 1 week. Biodegradability of the polymer in presence of esterase examined by ultraviolet visible spectroscopy indicated presence of monomer and polymer such that the polymer undergoes biodegradation. (42 pages)

L12 ANSWER 16 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-04678 BIOTECHDS Full-text
TITLE: Biocompatible matrix comprising hyaluronic acid and laminin, useful in implants for guiding tissue regeneration, tissue engineering, coating medical devices or scaffolds and as vehicles to support cell growth in vivo;
cell immobilization on support matrix for transplantation and disease therapy
AUTHOR: SHAHAR A; NEVO Z; ROCHKIND S
PATENT ASSIGNEE: NVR LABS BVI
PATENT INFO: WO 2002039948 23 May 2002
APPLICATION INFO: WO 2001-IL1050 13 Nov 2001
PRIORITY INFO: US 2000-248447 14 Nov 2000; US 2000-248447 14 Nov 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-713226 [77]
AN 2003-04678 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - A biocompatible matrix (I) comprising hyaluronic acid and laminin cross-linked by an exogenous cross-linking agent to form a combined gel, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a cell culture (II) comprising several cells cultured in or on (I); (2) an implant (III) comprising (I); (3) an implant (IV) comprising (II); (4) preparing (M1) a biocompatible matrix to be implanted into a human subject comprises: (a) hydrating hyaluronic acid or salt or hyaluronan; (b) selecting a laminin solution; (c) cross-linking the hydrated hyaluronan and laminin to form a combined gel, and optionally adding bioactive or structural components to the gel; (5) a kit (V) for carrying out M1, comprises at least one dose of each constituent solution necessary to obtain the gel which forms the biocompatible matrix; and (6) a medical device (VI) comprising (I) or (II).

WIDER DISCLOSURE - Disclosed are compositions and processes for producing the composition comprising (I). BIOTECHNOLOGY - Preferred Matrix: In (I), the exogenous cross-linking agent is a sugar. The gel has a viscosity of 4-48 centipoise. (I) comprises 0.05%-5% of hyaluronic acid, 0.005%-0.5% laminin such as laminin 1 through laminin 12, its fragments and derived peptides, which retain the activity of intact laminin. The hylauronic acid component is an acid, salt or a cross-linked hyaluronan. (I) further comprises a bioactive compound or drug such as hormone, growth factor, proteolytic enzyme, anti-fibrotic agent, chemotherapeutic antiproliferative agent, coagulative agent, anti-coagulative agent, immunomodulator or growth inhibitor, and a structural component such as an extracellular matrix component, a natural polymer, a synthetic polymer or their mixture. At least one polymer component forms multiple carriers within the combined hyaluronic acid laminin gel. Preferred Cell Culture: In (II), the cells are cultured on multiple carriers within a combined hyaluronic acid laminin gel. (II) comprises multiple cell types, cloned cell types, bioengineered type, embryonic stem cell type or autologous cell type. Preferred Method: M1 further involves shaping the matrix, culturing or embedding cells in or on the gel, where the cultured cells are adherent on several discrete carriers within the gel. Preferred Device: In (VI), the gel forms a coating on the exposed surface of the device and further comprises a bioactive compound or drug. (VI) is preferably, a stent which is an intracoronary stent. The viscosity of the gel varies from the inner surface to the outer surface.

USE - (I) is useful for transplanting cells to an individual, by transplanting an implant comprising cells in or on (I). (M1) is useful for preparing a biocompatible matrix to be implanted into a human subject (claimed). (I) is useful in clinical applications including as implants for guided tissue regeneration, tissue engineering, and for coating of medical device or scaffold as well as in biotechnology. (I) serves as vehicle to support cell growth in vivo and as a depot to transport various bioactive high molecular weight substance including growth factors, growth inhibitors, adhesive molecules, adhesion inhibitors and/or small molecular weight drugs. (I) is useful as substrate for supporting cell selection, cell growth, cell propagation or differentiation in vitro as well as in vivo. (I) is useful for sustained release of bioactive components in vivo. (I) is suitable for the culture of cells in a three-dimensional manner at varying cell densities. (I) when coated on a scaffold of a vascular stent or in other application, serve as physical buffer e.g. to prevent damage to the endothelial surface of the blood vessels upon placement of the stent. (I) is used in conjugation with medical devices in the vascular system in general and the cardiovascular system in particular.

ADVANTAGE - (I) has the ability to support cell growth, particularly of cell types for which satisfactory growth is not readily achieved e.g. neural cell types. EXAMPLE - The hyaluronic acid (HA) component was provided by Biotechnology General Limited. It was examined for optimal molecular weight, concentration, viscosity and possible modifications of the active groups (e.g. hydroxyl to benzyl). The composition of HA contained 90% sodium hyaluronate, molecular weight (mega Daltons)-2.01, protein (mg/g)-0.2,

absorbance at 257 nm (1% solution)-0.02, endotoxin (1% solution) (EU/mg)-less than 0.125, (non-inflammatory substances). The HA-gel had a viscosity of dynamic intrinsic viscosity measured by streaming a solution in a capillary of a viscometer at 25degreesC and expressed as micro viscosity coefficient in centipoise ranging between 8-48 depending on the molecular weight that range between 2 to 8x106 Daltons. The second component LN was tested and compared with different laminin peptides around the active sites, for biological activities. The best characterized LN was LN-1 (composed of 1alpha, 1beta and 1gamma), promoted neuronal outgrowth in all developmental stages in embryonal and adult neurons. Cross-linking between the two components was induced, preferably using sugar molecules. The interacting outcome was confirmed by an appropriate means including crystallographic analysis. The combined gel was then used in various cell type cultures, tissue implants and for other applications e.g. the gel was used for growing neuronal tissues in vitro. 35 mm plastic dishes were coated with HALN and the coated dishes were left for 1 hour and an amount of 600 microl per dish of nutrient medium was added, sufficient to cover the coated area with a thin layer. Cross-linking was performed with a suitable cross-linking agent e.g. sugar to achieve the desired degree of rigidity, porosity, biodegradability, etc. Tissue explants (about 5-6 per dish) or dissociated nerve cell aggregates, previously suspended on microcarriers (MCs) were added to the viscous substrate gel matrix and became firmly attached and covered by the gel. After that, intensive sprouting together with cell migration and new outgrowth occurred to form a dense network of neuronal and glial cells. The neuronal cells embedded in HA-LN-gel was used in e.g. for filling post-traumatic or post-operative cyst or cavities resulted from injury, hematomas, or tumor removal.(42 pages)

L12 ANSWER 17 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-02245 BIOTECHDS Full-text
TITLE: A co-culture, useful as mammalian transplant tissue, comprises hepatocytes and hepatic stellate cells formed on a surface which is substantially free of molecules which provide signals to cells in the co-culture;
human cell culture, biodegradable material surface, growth factor and protein solution for artificial organ and tissue engineering
AUTHOR: SHAKESHEFF K; BHANDARI R N B; RICCALTON-BANKS L A; QUIRK R
PATENT ASSIGNEE: UNIV NOTTINGHAM
PATENT INFO: WO 2002048318 20 Jun 2002
APPLICATION INFO: WO 2001-GB5566 17 Dec 2001
PRIORITY INFO: GB 2000-30584 15 Dec 2000; GB 2000-30584 15 Dec 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-627259 [67]
AN 2003-02245 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - A co-culture (I) comprising hepatocytes and hepatic stellate cells formed on a surface which is substantially free of molecules which provide signals to cells in the co-culture, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) culturing (M1) hepatocytes, by co-culturing the hepatocytes with hepatic stellate cell on a surface which is substantially free of molecules which provide signals to the cells in the co-culture; and (2) a surface (II) for (I), where (II) is substantially free of molecules which are capable of providing signals to the cells in the co-culture. BIOTECHNOLOGY - Preferred Co-culture: In (I), the surface comprises a polymeric material or a

biodegradable material such as poly(alpha-hydroxy acid), preferably poly(lactic acid) or a copolymer of poly(lactic acid-co-glycolic acid). (I) is substantially free of added growth factors, extracellular matrix proteins or other cell types. The hepatocytes and/or the hepatic stellate cells are derived from human liver tissue. Preferred Method: In (M1), the surface is treated prior to seeding of the cells to block non-specific surface interactions. The surface is treated with a protein solution, preferably a bovine serum albumin solution.

USE - (I) is useful in in vitro toxicology testing of substances or metabolism testing of substances, where the substances are drugs or environmental pollutants, as mammalian transplant tissue, preferably human transplant tissue, as a component of engineered liver tissue for implantation into a human, or as a component of a liver-assist device (claimed).

ADVANTAGE - (I) has improved functionality in terms of their ability to metabolize drugs using cytochrome P450 enzymes. EXAMPLE - Fresh rat hepatocytes were isolated and purified using a two-step collagenase perfusion method. Liver lobes were removed from male Wistar rats and perfused first with a calcium-free 4-(2-hydroxyethyl)piperazine-1-ethanesulfonic acid (HEPES) buffer and then with calcium- and collagenase- containing HEPES buffer. The lobes were then minced and filtered through cotton gauze to release the hepatocytes. The resultant cell suspension was washed twice by centrifugation. Hepatocytes, suspended in Williams E medium (WEM) containing 10% fetal calf serum (FCS) were separated from non-viable and non-parenchymal cells using a percoll density gradient centrifugation. The cells were then resuspended in WEM with FCS and used the same day. Viability, as determined using the trypan blue exclusion method, was between 85-95%. Stellate cells were collected from the hepatocyte isolation by pooling the collagenase perfusate and washings, which were then stored. The suspension was then aliquotted into 50 ml centrifuge tubes and spun at 600 rpm for 1 minute at 4 degrees Centigrade . After discarding the pellet, the supernatant was again spun at 600 rpm, this time for 3 minutes at 4 degrees Centigrade . This procedure was repeated three times, and the final centrifugation was performed at 900 rpm for 5 minutes. After the third spin, the supernatant was discarded and the pellet was resuspended in 10 ml phosphate buffered saline (PBS), which was then spun twice at 900 rpm for 5 minutes at 4 degrees Centigrade . The cells remaining in the pellet were finally resuspended in 20 ml Dulbecco's modified Eagle medium (DMEM) containing 10% FCS and then seeded in a culture flask. The media was changed after 5 hours. Cell attachment and co-culture was performed on modified poly (D,L-lactic acid) (PLA) surfaces. Stellate cells were incubated with Cell Tracker (RTM) green 5-chloromethylfluorescein diacetate (CMFDA) fluorescent stain by reconstituting the material in 11 microl dimethyl sulfoxide (DMSO) and adding this solution to the media of a confluent tissue culture flask for 45 minutes. The media was then replaced and the cells were incubated for a further hour. Following trypsinization and resuspension, these cells were centrifuged and resuspended in serum-free DMEM. Isolated hepatocytes were centrifuged and resuspended in 9 serum-free WEM. Co-culture studies used a suspension containing 20000 cells/ml of both hepatocytes and stellates. After 5 hour incubation, unadhered cells were removed by washing the PLA discs with fresh media three times. Cell attachment was investigated using a combined light and fluorescence microscopy approach in order to distinguish between the two cell populations. 10 images were taken from duplicate wells after a 5 hour incubation period. In all experiments, cells were grown simultaneously on tissue culture plastic in serum-containing medium as a positive control. The effect of surface on co-cultures was monitored over a five-day period and within 3 hours of seeding stellate cells began to spread on the PLA surface, an event that did not occur in a single-cell type environment. By the second day, these cells were sending out processes specifically towards hepatocytes and on day three, most cells had clustered together to form multilayered

spheroid-type structures. These cell structures mimicked the morphology of in vivo liver lobules and exhibited enhanced activity and prolonged functionality compared with hepatocyte monolayers. (21 pages)

L12 ANSWER 18 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-14143 BIOTECHDS Full-text
TITLE: Novel non-contracting, hydrophilic and translucent tissue equivalent useful as transplant material, comprises substantially dimensionally stable collagenous matrix, and mesenchymal cells retained within matrix;
mesenchymal cell tissue engineering
AUTHOR: DIMITRIJEVICH S D; GRACY R W
PATENT ASSIGNEE: DIMITRIJEVICH S D; GRACY R W
PATENT INFO: US 20020028192 7 Mar 2002
APPLICATION INFO: US 1998-775843 24 Mar 1998
PRIORITY INFO: US 2001-775843 1 Feb 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-280150 [32]
AN 2002-14143 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - A substantially non-contracting, hydrophilic and translucent tissue equivalent (I) which comprises a substantially dimensionally stable collagenous matrix and mesenchymal cells retained within the matrix, where the collagenous matrix is free from covalent crosslinks and dissociated by mild treatment with collagenase, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for making (M) an tissue equivalent involving combining an aqueous suspension of mesenchymal cells in a substantially serum-free nutrient medium at a temperature below ambient temperature with a solution of a collagenous material to produce a gelable admixture, and solidifying the admixture by gelation at a pH of about 7 and a temperature of about 37 degrees Centigrade to a translucent matrix.
BIOTECHNOLOGY - Preferred Tissue Equivalent: In (I), the mesenchymal cells are members consisting of fibroblasts (preferably corneal fibroblast), keratinocytes, melanocytes, corneal epithelial cells, corneal endothelial cells or their mixtures, preferably fibroblasts. The matrix is a member of collagen I, collagen III, collagen IV, fibrin, fibronectin, or their mixtures, preferably collagen I. (I) comprises an uncontracted collagenous matrix and a number of mesenchymal cells retained within the matrix, where the substantially non-contractile characteristic of (I) is independent of cell density is in the range of about 1.0 x 105 to about 5.0 x 105 cells/ml, and is independent of collagen concentration in the range of about 3-5 mg/ml. In (I), a second cellular component comprising keratinocytes is present. (I) has been formed in serum-free media and viably maintained in media comprising Ham's F-12 media supplemented with about 6.0 g/L glucose, no more than 2 mM calcium, about 50 mug/ml alpha-ketoglutarate, about 27 mg/ml glycine, 50 mug/ml ascorbate and no more than about 5% serum. The collagenous matrix is a three-dimensional collagenous matrix. Preferred Method: In (M), the nutrient medium contains no more than 2 mM of calcium. The solidification is effected in an incubator at about 37 degrees Centigrade. The culture medium exhibits an oxygen partial pressure of at least 300 mm of mercury but no more than 1250 mm of mercury. (M) comprises combining an aqueous suspension of initial mesenchymal cells in the substantially serum-free nutrient medium, solidifying the admixture by gelation to a translucent collagenous matrix, combining the translucent collagenous matrix with an aqueous suspension of other mesenchymal cells and incubating the resultant combination for a time period sufficient for the other mesenchymal cells to attach to the

collagenous matrix. The additional collagenous material is combined with the translucent collagenous matrix. The additional collagenous material is a member of collagen I, collagen III, fibrin, fibronectin, or their mixtures, preferably collagen IV, or is a mixture of fibronectin and laminin, or a mixture of fibronectin, collagen and laminin. (M) comprises the additional step of contacting the produced tissue equivalent with further mesenchymal cells.

USE - (I) is useful for a variety of complete tissue replacements including skin and cornea, for the study of fundamental mechanisms and therapeutic approaches in wound healing, for supporting the growth and differentiation of various epithelial and endothelial cells, as a transplant material, for screening, testing and evaluating potential drugs and consumer products, as an implantable source of exogenous substances, such as substances used to facilitate processes such as wound healing, for studies of effects of drugs, cosmetics and other pharmaceutical agents, for production of biocompatible clinical products for tissue replacement and augmentation, and for research studies on fundamental aspects of tissue structure and function.

ADVANTAGE - (I) more closely resembles normal tissues than conventional tissue equivalents, and supports growth and differentiation of epithelial cells as well as the growth of endothelial cells. Both the epithelial and endothelial surfaces produced on (I) display characteristic histological features of normal tissues. (I) is hydrophilic and translucent, permitting the visual observation of the cellular components by transmitted light and fluorescence microscopy. Cellular viability, cell motility, as well as cellular growth and differentiation can be directly observed. Thus, quantitative evaluation of the status of cells (I) can be conveniently and rapidly assessed by either manual or automated methods. (I) remains substantially hydrated, and thus maintains a greater permeability to exogenous material such as nutrients or drugs, in contrast to contracting tissue equivalents that lose water, resulting in the condensation of the matrix, equivalent to the formation of scar. The greater natural permeability of (I) provides a more realistic system to study the processes of tissue contraction and consequence scarring. (I), when used as a support for epithelial cells, supports cellular differentiation without the use of exogenous agents, such as retinoic acid. (I) when used as transplant material, is robust enough to survive manual manipulation. The translucence of (I) facilitates types of monitoring that support spectroscopic analyses. (I) is also ideal for other minimally invasive methods, such as studies of metabolic processes using nuclear magnetic resonance (NMR) spectroscopy and metabolic substrates labeled with paramagnetic stable isotopes. EXAMPLE - Construction of the dermal equivalent, a basic non-contracting tissue equivalent was as follows: Human cells were isolated from normal human skin tissue pieces obtained as infant foreskins, or remnants from breast or abdominal reduction surgery. The human skin tissue pieces were decontaminated, rinsed in sterile phosphate buffered saline (PBS) and dissected to remove subcutaneous fat and connective tissue, leaving pieces about 2-3 mm thick. The dissected skin tissue pieces were then rinsed again in sterile PBS and then submerged in a solution of dispase. The dispase-treated skin pieces were rinsed in sterile PBS, and the epidermis was grasped at its edge with fine forceps and peeled off. The removed epidermis pieces were placed in a 15 ml centrifuge tube and incubated in a trypsin/ethylenediaminetetraacetic acid (EDTA) solution. This procedure separated desired basal and suprabasal cells in an epidermal cell suspension from the pieces of stratum corneum. The basal cells were the primary proliferative cell population isolated by this procedure. At least 10 ml was added to the centrifuge tube and centrifuged to pellet the epidermal cells. The supernatant and pieces of stratum corneum were discarded. Fresh Dulbecco's modified Eagle medium (DMEM) plus 10% fetal bovine serum (FBS) was added to the centrifuge tube, and the pellet of epidermal cells was

dissociated. The epidermal cell suspension produced consisted of all types of epidermal cells, but keratinocytes and melanocytes predominated. The epidermal cells obtained were transferred to tissue culture flasks at the desired density in the appropriate medium. A cold solution of acid solubilized collagen was mixed with cold reconstituted buffer and cold serum-free 10xmodified Ham's F-12 medium. A suspension of fibroblasts in a small volume of serum-free modified Ham's F-12 medium was then added to the mixture of acid solubilized collagen, buffer and medium and the cells were dispersed thoroughly in the cold viscous solution to form a suspension of collagen and cells. Aliquots of this suspension of collagen and cells were then pipetted into the desired casting forms. The casting forms containing the suspension of collagen and cells were then transferred to an incubator at 37 degrees Centigrade, where gelation of the collagen took place. Additional Modified Ham's F-12 Medium containing 5% FBS was added to the tissue culture dishes containing the formed translucent tissue equivalents after 12 hours. Within 24 hrs the fibroblasts were observed to adopt their familiar quiescent elongated morphology. The tissue equivalents formed by this procedure were determined to be substantially non-contracting by measuring the density of tissue equivalents maintained for 3 weeks in Modified Ham's F-12 Medium. The produced non-contracting tissue equivalents were translucent, permitting the direct visual observation of the viability, morphology and other characteristics of the cellular component.(47 pages)

L12 ANSWER 19 OF 177 BIOTECHDS COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-10915 BIOTECHDS Full-text
TITLE: Recombinant production of materials, useful e.g. for preparing autologous transplants, by transforming cells, then cloning and implanting them in a recipient;
vector-mediated gene transfer and expression in cattle
fetal fibroblast cell culture, single chain
antibody and lysozyme for use in liver bone marrow stem cell isolation and transplantation
AUTHOR: BREM G
PATENT ASSIGNEE: APOGENE GMBH and CO KG
PATENT INFO: WO 2002009507 7 Feb 2002
APPLICATION INFO: WO 2000-EP7239 27 Jul 2000
PRIORITY INFO: WO 2000-7239 27 Jul 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-195903 [25]
AN 2002-10915 BIOTECHDS Full-text
AB DERWENT ABSTRACT:
NOVELTY - Recombinant production of materials (A), comprising transforming cells with (A)-encoding nucleic acid (I), cloning the transformed cells, and introducing the cloned cells into a recipient organism, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for producing cells, tissues or organs in animals, comprising: (a) isolating cells (B) from an individual; (b) implanting them into an immune-incompetent recipient animal; (c) growing the animal; (d) isolating (B) that are growing in the recipient and introducing these into an individual. BIOTECHNOLOGY - Preferred Process: The cells are cloned before transformation and are particularly isolated from an existing cell clone or organism. The recipient organism is an animal, fetus, embryo or cell aggregate, and preferably cells of a particular type are removed and replaced by recombinant cells. Especially, the recipient organism and transformed cells have the same genotype, and the recipient has been produced by cloning. Where the recipient is an immune-incompetent animal, the transformed cells are grown to form

tissues then these removed for subsequent transplant, especially into the original cell donor.
USE - The method is used to produce recombinant proteins, cells, tissues or organs, originally from a first individual, in an animal host, particularly for subsequent isolation and return to the first individual, especially for preparation of autologous human transplants.
ADVANTAGE - The method allows a previously prepared recipient organism to be provided very quickly with (I)-expressing cells (contrast up to 5 years required to produce a mature animal by germ line cell transfer), resulting in a production system quickly, efficiently and inexpensively. Typically, a recipient organism can be transformed with a new construct and expression clones made available in 2 months. The method should overcome the shortage of donor organs for transplantation. Cells from the cloning process survive longer than normal cells (up to 150 divisions), and may express (I) over the lifetime of the host animal. EXAMPLE - Primary bovine fetal fibroblasts were transformed with three linearized plasmids expressing a single-chain Fv (scFv) antibody, linked to chicken lysozyme gene matrix attachment sequences, p77 (Theriogenology, 43 (1995) 175;), and pJW6puro, and puromycin-resistant cells selected. The selected cells were cloned conventionally (nuclear transfer and transfer of transgenic embryos to surrogate dams), then fetuses recovered and transgenic bone marrow stem cells isolated from fetal livers and transfused into cloned calves of the same genotype. Blood samples were taken from the treated calves and processed for separation of bispecific scFv. These antibodies were able to lyse melanoma cells that carried the high molecular weight glycoprotein (the target against which the scFv is directed).(30 pages)

L12 ANSWER 20 OF 177 DISSABS COPYRIGHT (C) 2010 ProQuest Information and Learning Company; All Rights Reserved on STN

ACCESSION NUMBER:	2004:34955 DISSABS Order Number: AAI0805642
TITLE:	Effect of extracellular matrix proteins and a three dimensional polymer fiber scaffold on human muscle cell growth and differentiation
AUTHOR:	Cronin, Elizabeth Michelle [Ph.D.]; Nelson, Kevin D. [advisor]
CORPORATE SOURCE:	The University of Texas Southwestern Medical Center at Dallas (0761)
SOURCE:	Dissertation Abstracts International, (2003) Vol. 64, No. 10B, p. 5066. Order No.: AAI0805642.
DOCUMENT TYPE:	Dissertation
FILE SEGMENT:	DAI
LANGUAGE:	English
ENTRY DATE:	Entered STN: 20040701 Last Updated on STN: 20040701

AB Skeletal muscle possesses the unique ability to regenerate after injury. However, in some forms of muscular dystrophy or with any muscle tissue loss, the regenerative process is impaired or insufficient. Current attempts at restoring healthy muscle to a site of injury involve direct injection of muscle cells into damaged muscle tissue. This method has found only limited success because of low survival rates of transplanted cells and failure to restore normal tissue architecture. An alternative approach to repairing injured muscle is to deliver a tissue engineered segment of skeletal muscle into the damaged tissue. Formation of an implantable tissue fragment requires three dimensional growth and differentiation of cells on a biocompatible scaffold to form functional skeletal muscle. My work has focused on using a PLLA fiber scaffold to direct three dimensional growth, differentiation and organization of human skeletal muscle satellite cells. Over a two month period under

tissue culture conditions, PLLA fibers did not significantly degrade but maintained their structural integrity. However, these PLLA fibers contained multiple molecular weight species and caused a significant host inflammatory response in skeletal muscle, but did not affect the normal regenerative process within the muscle tissue. Skeletal muscle satellite cell attachment to a PLLA film was enhanced by a coating of either ECM gel, fibronectin, or laminin. The presence of these extracellular matrix proteins did not affect satellite cell growth. For PLLA fibers, only an ECM gel coating improved skeletal muscle satellite cell attachment. Based on this, ECM gel coated PLLA fibers were evaluated further. Skeletal muscle satellite cells differentiated into multinucleated myotubes along the PLLA fibers and expressed both sarcomeric proteins and genes related to myofiber formation. In addition, the PLLA fibers directed myotube orientation linearly, similar to muscle fiber organization in vivo. Thus, a PLLA fiber scaffold combined with extracellular matrix proteins provides an appropriate environment for the development of engineered skeletal muscle tissue.

L12 ANSWER 21 OF 177 DISSABS COPYRIGHT (C) 2010 ProQuest Information and Learning Company; All Rights Reserved on STN

ACCESSION NUMBER: 2001:49552 DISSABS Order Number: AAI0802375
TITLE: Fabrication of tissue engineering scaffolds with spatial control over architecture and cell-matrix interactions in three dimensions
AUTHOR: Koegler, Wendy S. [Ph.D.]; Griffith, Linda G. [adviser]
CORPORATE SOURCE: Massachusetts Institute of Technology (0753)
SOURCE: Dissertation Abstracts International, (2000) Vol. 62, No. 1B, p. 380. Order No.: AAI0802375.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English

AB The key accomplishment of this work is the demonstration of spatial control over architecture and surface chemistry in three-dimensional tissue engineering scaffolds. Tissues are characterized by a well-defined three-dimensional arrangement of cells. Spatial control of scaffold elements may be used to encourage the organization of cells into conformations resembling those of native tissue. Patterned scaffolds can be used to explore the healing process and then to design scaffolds with improved healing properties. Patterned architectures were fabricated from hydroxyapatite (HA), biodegradable polyesters (PLLA & PLLGA), and composites of degradable polyesters with bone (rat, bovine & human) using the Three-Dimensional Printing® process. Two extremes in scaffold design were explored: (1) dense structures for strength but with large (600 μm) channels for tissue and vasculature ingrowth, and (2) porous structures with room for cell attachment and growth. Porous structures fabricated from PLLGA and rat bone were implanted subcutaneously on the backs of rats. A typical inflammatory response was observed indicating an acceptable level of biocompatibility for 3DP® fabricated devices. Dense PLLGA devices fabricated by 3DP® were shown to still contain significant amounts of chloroform (≈5 wt%) after conventional vacuum drying. Liquid CO2 extraction was demonstrated to be capable of reducing chloroform in these devices to levels below 50 ppm. Drying was modeled as a diffusion process and diffusion coefficients were estimated for both a batch and a continuous-flow extraction system as 2.47 + 10-4 and 3.18 + 10-4 cm2/min, respectively. The model predicts that 1.5 and 9 hours of extraction are needed to reach chloroform levels of <50 ppm in 1 & 3 mm thick PLLGA bars, respectively.

Scaffolds with patterned surface chemistry were fabricated by printing Pluronic® F127, a surfactant molecule containing PEO chains, in selected locations. Spatial control of MG-63 cell adhesion and morphology was demonstrated on patterned PLLGA surfaces and porous scaffolds. Cell numbers were reduced on Pluronic® modified regions and those attached were less spread and present only in the lower regions of the scaffold. The MG-63 osteosarcoma derived cell line was used to develop assays for measuring cell adhesion, differentiation, and migration in 3D scaffolds. The adhesion, migration and differentiation of rat osteoblasts was then systematically analyzed on nonpatterned scaffolds fabricated with different concentrations of Pluronic® (0, 0.01, 0.1 & 0.5%). Adhesion and migration of rat osteoblasts decreased with increasing Pluronic® concentration. Although measurements were not statistically different, differentiation was judged to increase with Pluronic® concentration because proliferation decreased, alkaline phosphatase activity increased, and cells appeared less fibroblastic and had more microvilli. No significant differences in rat osteoblast behavior were seen on patterned scaffolds fabricated by printing one side with 0.5% Pluronic®. The hypothesis that Pluronic® migrates to the non-Pluronic ® side is supported by the fact that Pluronic® is present in the washes generated during the salt-leaching step of fabrication. (Copies available exclusively from MIT Libraries, Rm. 14-0551, Cambridge, MA 02139-4307. Ph. 617-253-5668; Fax 617-253-1690.)

L12 ANSWER 22 OF 177 DISSABS COPYRIGHT (C) 2010 ProQuest Information and Learning Company; All Rights Reserved on STN

ACCESSION NUMBER: 93:18061 DISSABS Order Number: AARNN72642
TITLE: THE EFFECTS OF SURFACE TOPOGRAPHY ON THE BEHAVIOUR OF CELLS ATTACHED TO PERCUTANEOUS IMPLANTS
AUTHOR: CHEHROUDI, BABAK [PH.D.]
CORPORATE SOURCE: THE UNIVERSITY OF BRITISH COLUMBIA (CANADA) (2500)
SOURCE: Dissertation Abstracts International, (1991) Vol. 53, No. 11B, p. 5634. Order No.: AARNN72642. 216 pages. ISBN: 0-315-72642-3.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19930426
Last Updated on STN: 19930426

AB The present studies were aimed to determine whether surface topography could be used to impede epithelial downgrowth on percutaneous implants based on those principles that have been found to control the direction and rate of cell migration in vitro. Studies in culture have indicated that cells can be guided by the grooved surfaces, a phenomenon called contact guidance.
In the first series of experiments, the effects of a V-shaped, 10-μm-deep grooved epoxy or titanium-coated epoxy substrata were studied on epithelial (E) cell behaviour. In vitro, grooved surfaces encouraged E cell adhesion and oriented clusters of E cells along their long axis. Seven or 10 days after percutaneous implantation of grooved and control smooth surfaces in rats, grooved surfaces significantly inhibited epithelial downgrowth on the epoxy or titanium-coated epoxy implants.
In the second series of experiments, the effects of groove parameters such as depth, spacing and orientation were tested in vivo. After 7 days percutaneous implantation of titanium-coated implants epithelial downgrowth was accelerated on the vertically oriented, 3 or 10 μm-

deep, grooved surfaces and inhibited on the horizontally oriented grooved surfaces, an observation that could represent the most direct evidence of contact guidance occurring in vivo. In the shallower horizontal grooves ($\le$10 μm-deep) epithelial downgrowth was probably inhibited by contact guidance because there was no evidence of fibroblasts (F) inserting into the implant surface. However, in the 19 μm-deep grooved surfaces, E cells bridged over the grooves and their migration appeared to be inhibited by the F that inserted into the implant surface. In the third series of experiments, the ultrastructural observations indicated that E cells closely attached to the smooth, and interdigitated with, the 3 μm and 10 μm grooved surfaces of titanium-coated implants. The ultrastructural observations on the orientation of E cells and F attached to the implant verified those noted at the light microscopic level. The objectives of the fourth experiment were (1) to examine cell behaviour on implants in which connective tissue contacted surfaces of various topographies and epithelium encountered only a smooth surface; (2) to compare one-stage and two-stage surgical techniques. A complex connective tissue organization that changed with time was noted on the micromachined surfaces whereas a capsule formed on the smooth surfaces. In some cases foci of mineralization were observed on the micromachined surfaces placed using a two-stage surgical technique. Apical migration of the epithelium was significantly ($p < .05) inhibited on all surfaces placed by the two-stage technique and by those micromachined surfaces that produced connective tissue ingrowth.
In the fifth study, the ultrastructural observations of the mineralized tissue formed on the micromachined surfaces, identified osteocyte-like cells and in some areas revealed close juxtapositioning of collagen and minerals to titanium without an intervening amorphous layer. The findings collectively indicate that contact guidance occurs on artificial surfaces in vivo, and micromachined surfaces could be incorporated advantageously to the design of implant surfaces to optimize their performance. (Abstract shortened by UMI.)

L12 ANSWER 23 OF 177 DISSABS COPYRIGHT (C) 2010 ProQuest Information and Learning Company; All Rights Reserved on STN
ACCESSION NUMBER: 90:13705 DISSABS Order Number: AAR9031567
TITLE: OSSEOUS IMPLANTS FOR EXPERIMENTAL STUDIES OF BONE, MARROW, AND MATERIALS BIOCOMPATIBILITY
AUTHOR: FOX, WILLIAM CASEY [PH.D.]; DILLER, KENNETH R. [advisor]
CORPORATE SOURCE: THE UNIVERSITY OF TEXAS AT AUSTIN (0227)
SOURCE: Dissertation Abstracts International, (1990) Vol. 51, No. 6B, p. 3012. Order No.: AAR9031567. 156 pages.
DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English
ENTRY DATE: Entered STN: 19921118
Last Updated on STN: 19921118
AB A cancellous access port port (CAP) osseous implant for repeated sampling of cancellous bone was developed and tested by the author. Cancellous bone healing within the CAP was removed from five adult and five elderly female baboons and compared between age groups and to healed trephine defect biopsies from the contralateral site. CAP and trephine biopsies were compared using quantitative histomorphometry. The histologic and morphologic characteristics of naive trephine were not distinguishable from 105- to 106-day healing duration CAP samples. Subsequent trephine biopsies that had healed coincident with CAP tissue ingrowth were histomorphometrically equivalent to CAP biopsies.

Cancellous bone healing the CAP for 62 to 63 days was significantly different in histomorphometric indices than 105- to 106-day CAP biopsies.
CAP biopsies demonstrated that elderly baboons had a significantly lower bone density. Osteoblast and osteoclast measurements indicated that an imbalance in the formation and resorption processes was present in the elderly baboon population. Elderly baboon cancellous tissue healing in the CAP for 105 to 106 days had three to four times the osteoclast activity of adult baboon ingrowth. The CAP and associated methods were shown to provide a representative biopsy of cancellous bone. The baboon implanted with a CAP was determined to be a suitable model of bone healing and remodeling for longitudinal studies. The CAP methodology causes little morbidity and no mortality in baboons allowing the humane study of bone disease and treatment without animal sacrifice. CAP infusion, material testing, and electrochemical transducer attachments were developed and tested. Solution infusion, biomaterials fixation, and electrochemical testing of materials in the medullary compartment were demonstrated. An Analytic Bone Implant (ABI) preceded the development of the CAP. The ABI was used to study the time course of osseous healing. Polymers, ceramics, and purified and recombinant factors were placed in the ABI to demonstrate the use of these implant systems for the study of osseous healing in the presence of materials. The CAP and ABI were shown to provide a consistent biopsy of cancellous bone, have high reliability, and be well tolerated by baboons.

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ACCESSION NUMBER:	2002309945 EMBASE Full-text
TITLE:	Novel synthetic selectively degradable vascular prostheses: A preliminary implantation study.
AUTHOR:	Izhar, Uzi; Schwalb, Herzl; Borman, Joseph B.
CORPORATE SOURCE:	Joseph Lunenfeld Cardiac Surgery Research Center, Hadassah University Hospital, Jerusalem, Israel.
AUTHOR:	Hellener, Gunnar R.; Hotoveli-Salomon, Anna; Marom, Gad; Stern, Theodor; Cohn, Daniel, Dr. (correspondence)
CORPORATE SOURCE:	Casali Institute of Applied Chemistry, Hebrew University of Jerusalem, Jerusalem, 91904, Israel.
AUTHOR:	Cohn, Daniel, Dr. (correspondence)
CORPORATE SOURCE:	Casali Inst. of Applied Chemistry, Hebrew University of Jerusalem, Jerusalem 91904, Israel.
SOURCE:	Journal of Surgical Research, (2001) Vol. 95, No. 2, pp. 152-160. Refs: 21 ISSN: 0022-4804 CODEN: JSGRA2
COUNTRY:	United States
DOCUMENT TYPE:	Journal; Article
FILE SEGMENT:	018 Cardiovascular Diseases and Cardiovascular Surgery 027 Biophysics, Bioengineering and Medical Instrumentation
LANGUAGE:	English
SUMMARY LANGUAGE:	English
ENTRY DATE:	Entered STN: 13 Sep 2002 Last Updated on STN: 13 Sep 2002

AB Background. Vascular grafts perform less well than autologous arterial or vein grafts. The purpose of this study was to evaluate the short-term performance of selectively biodegradable filament-wound vascular prostheses, comprising elastomeric poly(ether urethane) (Lycra) scaffolds and flexible, hydrophilic biodegradable coatings. Materials and methods. Two types of

selectively biodegradable vascular grafts were manufactured, comprising a filament-wound Lycra scaffold, subsequently coated with a biodegradable poly(ethylene glycol)/poly(lactic acid) (PELA) block copolymer. The two types of grafts differed in both the overall porosity of the scaffold and the hydrophilicity of the biodegradable constituent. A 60-mm-long and 6-mm-diameter filament-wound and polytetrafluoroethylene (ePTFE) grafts were implanted as interposition prostheses, randomly, at the right- and left-side carotid arteries. Results. Implantation studies proved the grafts to be patent and pulsatile for periods of up to 3 months. Increasing the scaffold porosity and enhancing the hydrophilicity of the biodegradable component improved both the transmural tissue ingrowth process and the vascularization of the prosthesis wall. Also, a well-adhered peripheral tissue and a thin, uniform intima and endothelial lining were obtained. All ePTFE graft controls, although patent, were rather stiff and nonpulsatile. A thick pseudointima, poorly attached to the prosthesis inner surface, was observed. The compliance of the wet grafts was significantly higher than in the dry state, stemming mainly from the water-plasticizing effect on the biodegradable component. The grafts explanted after a period of 6 weeks exhibited compliance only slightly lower than that of the wet grafts. After 12 weeks, however, the hoop compliance was 20% lower than that prior to implantation. At 100 mm Hg, for example, the original compliance of the wet graft was 2.5%/100 mm Hg decreasing to 2.0%/100 mm Hg after a 3-month implantation. The compliance reduction with implantation is attributed to the ingrowth of the perigraft tissue as revealed by the histological study. A compliance of 2.0%/100 mm Hg is slightly better than that of a standard PTFE graft with an original compliance of 1.6%/ 100 mm Hg. Yet it is still an order of magnitude smaller than that of a canine carotid artery. Conclusions. The improved mechanical properties and enhanced healing of the highly porous filament-wound Lycra scaffold graft coated with hydrophilic biodegradable PELA has the potential of being a highly effective small caliber prosthetic graft. .COPYRGT. 2000 Academic Press.

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ACCESSION NUMBER: 2002216850 EMBASE Full-text
TITLE: Three-dimensional macroporous calcium phosphate bioceramics with nested chitosan sponges for load-bearing bone implants.
AUTHOR: Zhang, Yong; Zhang, Miqin (correspondence)
CORPORATE SOURCE: Department of Materials Science, 302L Roberts Hall, University of Washington, Seattle, WA 98195-2120, United States. mzhang@u.washington.edu
SOURCE: Journal of Biomedical Materials Research, (2002) Vol. 61, No. 1, pp. 1-8. Refs: 34 ISSN: 0021-9304 CODEN: JBMRBG
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 8 Jul 2002 Last Updated on STN: 8 Jul 2002

AB Three-dimensional macroporous calcium phosphate bioceramics embedded with porous chitosan sponges were synthesized to produce composite scaffolds with high mechanical strength and a large surface/volume ratio for load-bearing bone repairing and substitutes. The macroporous calcium phosphate bioceramics

with pore diameters of 300 μm to 600 μm were developed using a porogen burn-out technique, and the chitosan sponges were formed inside the pores of the bioceramics by first introducing chiosan solution into the pores followed by a freeze-drying process. Our scanning electron microscopy results showed that the pore size of chitosan sponges formed inside the macroporous structure of bioceramics was approximately 100 μm, a structure favorable for bone tissue in-growth. The compressive modulus and yield stress of the composite scaffolds were both greatly improved in comparison with that of HA/β-TCP scaffolds. The simulated body fluid (SBF) and cell culture experiments were conducted to assess the bioactivity and biocompatibility of the scaffolds. In the SBF tests, a layer of randomly oriented needle-like apatite crystals formed on the scaffold surface after sample immersion in SBF, which suggested that the composite material has good bioactivity. The cell culture experiments showed that MG63 osteoblast cells attached to the composite scaffolds, proliferated on the scaffold surface, and migrated onto the pore walls, indicating good cell biocompatibility of the scaffold. The cell differentiation on the composite scaffolds was evaluated by alkaline phosphatase (ALP) assay. Compared with the control in tissue culture dishes, the cells had almost the same ALP activity on the composite scaffolds during the first 11 days of culture. .COPYRGT. 2002 Wiley Periodicals, Inc.

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ACCESSION NUMBER: 2000348654 EMBASE Full-text
TITLE: Fibrous tissue ingrowth and attachment to porous tantalum.
AUTHOR: Hacking, S.A. (correspondence); Bobyn, J.D.; Toh, K.-K.; Tanzer, M.; Krygier, J.J.
CORPORATE SOURCE: Jo Miller Orthopaedic Research Lab., 1650 Cedar Avenue, Montreal, Que. H3G 1A4, Canada. ahacking@yahoo.com
SOURCE: Journal of Biomedical Materials Research, (Dec 2000) Vol. 52, No. 4, pp. 631-638.
Refs: 52
ISSN: 0021-9304 CODEN: JBMRBG
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
033 Orthopedic Surgery
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 26 Oct 2000
Last Updated on STN: 26 Oct 2000

AB This study determined the soft tissue attachment strength and extent of ingrowth to a porous tantalum biomaterial. Eight dorsal subcutaneous implants (in two dogs) were evaluated at 4, 8, and 16 weeks. Upon retrieval, all implants were surrounded completely by adherent soft tissue. Implants were harvested with a tissue flap on the cutaneous aspect and peel tested in a servo-hydraulic tensile test machine at a rate of 5 mm/min. Following testing, implants were dehydrated in a solution of basic fuschin, defatted, embedded in methylmethacrylate, and processed for thin-section histology. At 4, 8, and 16 weeks, the attachment strength to porous tantalum was 61, 71, and 89 g/mm respectively. Histologic analysis showed complete tissue ingrowth throughout the porous tantalum implant. Blood vessels were visible at the interface of and within the porous tantalum material. Tissue maturity and vascularity increased with time. The tissue attachment strength to porous tantalum was three- to six-fold greater than was reported in a similar study with porous beads. This study demonstrated that porous tantalum permits rapid

ingrowth of vascularized soft tissue, and attains soft tissue attachment strengths greater than with porous beads. (C) 2000 John Wiley and Sons, Inc.

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ACCESSION NUMBER: 1999332169 EMBASE Full-text
TITLE: Guided tissue fabrication from periosteum using preformed biodegradable polymer scaffolds.
AUTHOR: Thomson, Robert C.; Mikos, Antonios G.
CORPORATE SOURCE: Inst. of Biosci. and Bioengineering, Rice University, Houston, TX, United States.
AUTHOR: Beahm, Elizabeth; Miller, Michael J. (correspondence)
CORPORATE SOURCE: Department of Plastic Surgery, Univ. Texas M.D. Anderson Cancer C., Box 62, 1515 Holcombe Blvd, Houston, TX 77030, United States. mmiller@mdanderson.org
AUTHOR: Lemon, James C.
CORPORATE SOURCE: Department of Head and Neck Surgery, Univ. Texas M.D. Anderson Cancer C., Houston, TX, United States.
AUTHOR: Satterfield, William C.
CORPORATE SOURCE: Division of Veterinary Medicine, Univ. Texas M.D. Anderson Cancer C., Houston, TX, United States.
AUTHOR: Aufdemorte, Thomas B.
AUTHOR: Miller, Michael J. (correspondence)
CORPORATE SOURCE: Department of Plastic Surgery, University of Texas, M.D. Anderson Cancer Center, Box 62, 1515 Holcombe Boulevard, Houston, TX 77030, United States. mmiller@mdanderson.org
SOURCE: Biomaterials, (Nov 1999) Vol. 20, No. 21, pp. 2007-2018.
Refs: 38
ISSN: 0142-9612 CODEN: BIMADU
PUBLISHER IDENT.: S 0142-9612(99)00103-9
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
033 Orthopedic Surgery
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 7 Oct 1999
Last Updated on STN: 7 Oct 1999

AB A successful tissue engineering method for bone replacement would imitate natural bone graft by providing the essential elements for new bone formation using synthetic scaffolds, osteogenic cell populations, and bone induction factors. This is a study of the suitability of various formulations of poly(DL-lactic-co-glycolic acid) (PLGA) foams to provide a tissue conducting scaffold in an ovine model for bone flap fabrication. Three formulations were used of different copolymer ratio and molecular weight. Porous wafers of PLGA were stacked into rectangular chambers (volume 4cm3) enclosed on five sides. Some chambers also contained autologous morcellized bone graft (MBG). The chambers were inserted with the open face adjacent to the cambium layer of the periosteum in rib beds of seven sheep and harvested after 8 weeks in vivo. Gross and histologic examination of the resulting tissue specimens demonstrated molded units of vascularized tissue generally conforming to the shape of the chambers and firmly attached to the periosteum. Polymer degradation appeared to occur by varying degrees based on polymer formulation. New bone formation was observed only in areas containing MBG. There was no evidence of significant inflammatory reaction or local tissue damage at 8

weeks. We conclude that a PLGA foam scaffold is (1) an efficient conductor of new tissue growth but not osteoinductive, (2) contributes to the shape of molded tissue, and (3) biocompatible when used in this model. Further studies are warranted to develop practical methods to deliver bone induction factors to the system to promote osseous tissue generation throughout the synthetic scaffold. Copyright (C) 1999 Elsevier Science B.V.

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ACCESSION NUMBER: 1999089777 EMBASE Full-text
TITLE: Genes associated with embryonic attachment and implantation and the role of progesterone.
AUTHOR: Giudice, Linda C., Dr. (correspondence)
CORPORATE SOURCE: Div. Repro. Endocrinol. Infertility, Ctr. Res. Women's Hlth. Repro. Med., Stanford University, Stanford, CA, United States.
AUTHOR: Giudice, Linda C., Dr. (correspondence)
CORPORATE SOURCE: Div. Repro. Endocrinol. Infertility, Stanford Univ. School of Medicine, 300 Pasteur Drive, HH333, Stanford, CA 94305-5317, United States.
AUTHOR: Giudice, Linda C., Dr. (correspondence)
CORPORATE SOURCE: Div. Repro. Endocrinol./Infertility, Stanford University School of Med., 300 Pasteur Drive, Stanford, CA 94305-5317, United States.
SOURCE: Journal of Reproductive Medicine for the Obstetrician and Gynecologist, (1999) Vol. 44, No. 2 SUPPL., pp. 165-171.
Refs: 32
ISSN: 0024-7758 CODEN: JRPMAP
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article; (Conference paper)
FILE SEGMENT: 010 Obstetrics and Gynecology
021 Developmental Biology and Teratology
003 Endocrinology
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 1 Apr 1999
Last Updated on STN: 1 Apr 1999

AB Implantation in humans is a complex process that involves embryo apposition and attachment to the maternal endometrial epithelium, traversing adjacent cells of the epithelial lining and invasion into the endometrial stroma. These processes involve a variety of molecules that are not unique in themselves but play unique roles in the process of implantation. Genes important to embryonic attachment include the epidermal growth factor (EGF) family (EGF, heparin-binding EGF-like growth factor and amphiregulin) and the cytokines (colony-stimulating factor, leukemia inhibitory/actor and interleukin-1), as well as a variety of cell adhesion molecules and other glycoproteins. Epithelial factors important in attachment may be regulated by paracrine interactions via the endometrial epithelium and the endometrial stroma, which is a progesterone-responsive tissue. Investigations into genetic knockout animal models and natural mutations in the mouse have demonstrated that genes important to the implantation process affect both embryo attachment and decidualization and include cyclooxygenase-2 and the homeobox gene HOXA-10. Calcitonin is believed to play a role in preparing the apical cell pole for contact with the trophoblast. A number of factors contribute to endometrial regulation by progesterone; some are important in embryo attachment as well as in the invasive phase of implantation. Four specific factors regulated in the endometrial stroma by progesterone are

transforming growth factorβ, interleukin-1 and insulin-like growth factor binding protein-1, tissue inhibitors of metalloproteinases (TIMPs) (especially TIMP-3) and fibronectin, all of which have been demonstrated to inhibit trophoblast invasiveness. Current research should provide answers regarding the effects of various levels of progesterone on the implantation process.

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ACCESSION NUMBER: 1998017295 EMBASE Full-text
TITLE: Advances in tissue engineering of blood vessels and other tissues.
AUTHOR: E. Niklason, Laura
CORPORATE SOURCE: Dept. Anaesthesia and Critical Care, Massachusetts General Hospital, Boston, MA, United States.
AUTHOR: E. Niklason, Laura; S. Langer, Robert
CORPORATE SOURCE: Department of Chemical Engineering, Massachusetts Inst. of Technology, Cambridge, MA, United States.
AUTHOR: E. Niklason, Laura
CORPORATE SOURCE: Dept. Anaesthesia and Critical Care, Massachusetts General Hospital, Boston, MA 02114, United States.
AUTHOR: Niklason, L.E. (correspondence)
CORPORATE SOURCE: Department Anaesthesia Critical Care, Massachusetts General Hospital, Boston, MA 02114, United States.
SOURCE: Transplant Immunology, (Dec 1997) Vol. 5, No. 4, pp. 303-306.
Refs: 30
ISSN: 0966-3274 CODEN: TRIME2
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; (Short Survey)
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
009 Surgery
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 22 Jan 1998
Last Updated on STN: 22 Jan 1998

AB Tissue engineering is a new and rapidly expanding field, in which techniques are being developed for culturing a variety of tissues both in vitro and in vivo using polymer 'scaffolds' to support tissue growth. Polymer scaffolds used in tissue engineering are generally biodegradable, often involving compounds which are already approved for human implantation. In some cases, these polymers may be chemically modified to exhibit selective cell adhesion properties, which enhance cell attachment and subsequent tissue growth. Many cell types have been successfully cultured on these scaffolds, including smooth muscle cells, endothelial cells, hepatocytes and chondrocytes. Tissue engineering holds the potential for the in vitro development of autologous or allogeneic transplantable vascular conduits. Each year in the USA, there are approximately 1.4 million procedures performed which require arterial prostheses. Most of these procedures are in small calibre (< 6 mm) vessels, for which synthetic graft materials are not generally suitable. While autologous venous or arterial vessels are generally used, not all patients possess adequate conduit for revascularization. Tubular scaffolds have been specially designed for culturing small calibre arteries in vitro. Bovine aortic vascular cells were seeded and cultured on these polymer scaffolds, and grown under conditions of pulsatile pressure and intra-luminal flow. To minimize contamination during the weeks of tissue culture required to produce an arterial prosthesis, a sterile incubator system was developed. Preliminary

studies have achieved good cell densities of both smooth muscle cells and endothelial cells on biodegradable polymer scaffolds.

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ACCESSION NUMBER: 1994356032 EMBASE Full-text
TITLE: Temporomandibular joint disc replacement made by tissue-engineered growth of cartilage.
AUTHOR: Puelacher, W.C., Dr. (correspondence); Wisser, J.; Vacanti, C.A.; Ferraro, N.F.; Jaramillo, D.; Vacanti, J.P.; Thomas, M.
CORPORATE SOURCE: Dept. of Oral/Maxillofacial Surgery, University Clinic of Dental Medicine, Leopold Franzens University, Maximilianstrasse 10, 6020 Innsbruck, Austria.
SOURCE: Journal of Oral and Maxillofacial Surgery, (1994) Vol. 52, No. 11, pp. 1172-1178.
ISSN: 0278-2391 CODEN: JOMSDA
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 011 Otorhinolaryngology
027 Biophysics, Bioengineering and Medical Instrumentation
009 Surgery
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 14 Dec 1994
Last Updated on STN: 14 Dec 1994

AB Objective: To test the effectiveness of the new technique of tissue-engineered growth of cartilage, temporomandibular joint (TMJ) disc replacements were created by seeding dissociated chondrocytes on synthetic, three-dimensional, bioresorbable polymer constructs of a predetermined anatomic shape, incubating the cell-polymer constructs in vitro, and transplanting them into test animals. Materials and Methods: Twelve highly porous and bioresorbable cell-transplantation devices in the shape of TMJ discs were created using biodegradable polylactic and polyglycolic acid fibers. Bovine articular cartilage was dissociated into chondrocytes and the cells were allowed to attach to the three-dimensional polymer scaffolds and multiply in vitro. After 1 week, the cell-polymer constructs were implanted subcutaneously into nude mice. The neocartilage was assessed by magnetic resonance imaging (MRI) techniques, gross inspection, histology, and biomechanical and biochemical analysis after 12 weeks. Results: All implants seeded with chondrocytes showed gross evidence of histologically organized hyaline cartilage. The scaffolds maintained their specific shape. They not only showed appropriate intrinsic stability during neomorphogenesis of cartilage in vitro and in vivo, but also seemed to guide the growth of cartilage. The presence of sulfated glycosaminoglycans was shown by aldehyde fuchsin alcian blue staining of the specimens. Type II collagen, considered to be indicative of cartilage formation, was found in the specimens tested. MRI showed signal characteristics similar to those of hyaline cartilage. Analysis of neocartilage force/displacement curves and aqueous phase compliance using a closed compression chamber suggested that the ability of the constructs to resist deformation was similar to that of native donor cartilage. Conclusion: The technology of tissue-engineered growth of cartilage on individually designed scaffolds may have many applications not only in reconstructive surgery of the TMJ, but also in craniomaxillofacial, plastic, and orthopedic surgery.

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ACCESSION NUMBER: 1993170974 EMBASE Full-text
TITLE: Synthetic polymer matrices for neural cell transplantation.
AUTHOR: Woerly, S., Dr. (correspondence); Ulbrich, K.; Chytry, V.; Smetana, K.; Petrovicky, P.; Rihova, B.; Morassutti, D.J.
CORPORATE SOURCE: Biomaterial Institute, Hopital Saint-Francois d'Assise, 10 rue de l'Espinay, Que. G1L 3L5, Canada.
SOURCE: Cell Transplantation, (1993) Vol. 2, No. 3, pp. 229-239.
ISSN: 0963-6897 CODEN: CTRAE8
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article; (Conference paper)
FILE SEGMENT: 026 Immunology, Serology and Transplantation
029 Clinical and Experimental Biochemistry
008 Neurology and Neurosurgery
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 11 Jul 1993
Last Updated on STN: 11 Jul 1993

AB This study proposes a strategy to promote the integration of a neural graft into the host brain tissue. It involves the attachment of donor cells to a polymeric matrix, and the implantation of this cell-polymer matrix. We have synthesized hydrogels based on N-(2-hydroxypropyl)-methacrylamide (HPMA) to produce highly porous matrices. As preliminary steps, we have examined: 1) The response of the brain tissue to the implantation of PHPMA/collagen hydrogels; 2) adhesion, growth, differentiation, and viability of embryonic neuronal cells, and embryonal carcinoma-derived neurons seeded onto PHPMA substrates containing hexosamine residues (glucosamine and N-acetylglucosamine), and after entrapment of cells within the hydrogels. Histological analysis seven wk after implantation showed the tolerance of PHPMA hydrogels, and the penetration of host cells into the pore structures. However, cellular ingrowth requires the presence of collagen, and is dependent upon porosity. In vitro data showed that PHPMA substrates supported neuronal cell attachment and neuritic growth, but the biocompatibility of the substrate was enhanced after incorporation of N-acetylglucosamine into the hydrogel. The data also showed the feasibility of entrapping cells into the polymer matrices, and that these 'cellular' hydrogel matrices could be maintained in vitro with preservation of cell viability and differentiation. These findings suggest that PHPMA-based hydrogels can serve as carriers for neural transplant, and as a support to guide tissue ingrowth and organization.

L12 ANSWER 32 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1991039565 EMBASE Full-text
TITLE: Experimental microvenous reconstructions with Gore-Tex polytetrafluoroethylene prostheses implanted by means of the sleeve anastomotic technique.
AUTHOR: Van Der Lei, B.; Bartels, H.L.; Dijk, F.; Schakenraad, J.M.; Nieuwenhuis, P.; Robinson, P.H.
CORPORATE SOURCE: Department of Plastic and Reconstructive Surgery, University Hospital, Groningen, Oostersingel 59, P.O. Box 30.001, 9700 RB, Groningen, Netherlands.
SOURCE: Microsurgery, (1991) Vol. 12, No. 1, pp. 23-29.
ISSN: 0738-1085 CODEN: MSRGDQ
COUNTRY: United States

DOCUMENT TYPE: Journal; Article
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 16 Dec 1991
Last Updated on STN: 16 Dec 1991

AB Polytetrafluoroethylene (PTFE) prostheses (Gore-Tex®; ID, 1 mm; length, 5-7 mm; wall thickness, 0.2 mm; fibril length, 30 μm, n = 28) were implanted into the rat femoral vein by means of the sleeve anastomotic technique to enhance the patency rate. In the control group, PTFE prostheses (n = 8) were implanted by means of the end-to-end technique. In the experimental group patency and healing of the PTFE prostheses were evaluated at 1 day (n = 4), 1 week (n = 6), 3 weeks (n = 6), 6 weeks (n = 6), and 12 weeks (n = 6) after implantation by means of macroscopic inspection and routine light and scanning electron microscopy. All prostheses, except one at 1 week after implantation, were patent at the time of removal. All of the microvenous prostheses were completely covered by an endothelial layer at 3, 6, and 12 weeks after implantation . Occasionally some smooth muscle-like cells could be found underneath this endothelial layer, but stenosis was never observed at the anastomotic sites. Only scarce tissue ingrowth was observed in the wall of the PTFE prostheses. In the control group, all prostheses, except one prosthesis after 3 weeks, were found to be occluded. An occlusive mural thrombus was found firmly attached at the anastomoses at 1 day, and an organized thrombus at 3 weeks after implantation. The patent prosthesis demonstrated complete endothelial healing. These results demonstrate the importance of the sleeve anastomotic technique and the potential of PTFE prostheses as a microvenous conduit when implanted by means of the sleeve anastomotic technique in experimental reconstructive microvascular procedures.

L12 ANSWER 33 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1991003548 EMBASE Full-text
TITLE: Use of a piezoelectric film sensor for monitoring vascular grafts.
AUTHOR: Gupta, S.K., Dr. (correspondence); Dietzek, A.M.; Veith, F.J.; Torres, M.; Kram, H.B.; Wengerter, K.R.
CORPORATE SOURCE: Division of Vascular Surgery, Montefiore Medical Center, 111 East 210th Street, New York, NY 10467, United States.
SOURCE: American Journal of Surgery, (1990) Vol. 160, No. 2, pp. 182-186.
ISSN: 0002-9610 CODEN: AJSUAB
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article; (Conference paper)
FILE SEGMENT: 009 Surgery
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 16 Dec 1991
Last Updated on STN: 16 Dec 1991

AB Detection of failing arterial reconstructions requires intensive surveillance by frequent physical examination and noninvasive laboratory testing. However, many grafts fail during the intervals between these examinations. For this reason, we have developed an implantable miniaturized piezoelectric flow detection device whose function can be monitored externally by radiotransmission across the skin. Sensors were constructed from ultrathin polyvinylidene fluoride (PVF2) with piezoelectric activity and attached with silicone fixative to 6-mm polytetrafluoroethylene grafts. Ten of these grafts were placed in mongrel dogs as iliofemoral bypasses. Real time data were acquired from the sensors at a rate of 200 Hz, using a DATAQ A/D data acquisition board and CODAS data acquisition software, while simultaneous

blood flow (using an electromagnetic flowmeter) and intraluminal pressure were processed by using separate channels of the same data acquisition board. The data were stored on computer storage media and analyzed by the ASYST software, which allows simultaneous signal curves to be compared using regression analysis. In the resting state, the mean blood flow was 123 ± 16 mL and the mean intraluminal pressure was 124/78 mm Hg, and there was perfect correlation between the PVF2 sensor and the flowmeter and between the sensor and the intraluminal pressure (correlation coefficient, r ≥0.99 and r ≥0.93, respectively). A tourniquet was applied to the iliac artery proximal to the graft to reduce the flow to approximately half of the resting state (mean flow after tourniquet: 66 ± 6 mL/minute). Signal tracings from the three sources showed a remarkable similarity with a very high correlation coefficient (r ≥0.99 between sensor and flowmeter and r ≥0.92 between sensor and the pressure signal). These preliminary results show that the sensors made from low-profile and low-mass PVF2 material have the potential of being implanted around grafts for long-term, continuous monitoring of graft function. Further studies involving long-term implantation to assess the effect of tissue ingrowth and loss of compliance are necessary before this device can be used clinically.

L12 ANSWER 34 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 1981238263 EMBASE Full-text
TITLE: Soft tissue attachment of a filamentous carbon-absorbable polymer tendon and ligament replacement.
AUTHOR: Aragona, J.; Parsons, J.R.; Alexander, H.; Weiss, A.B.
CORPORATE SOURCE: Sect. Orthop. Surg., Coll. Med. Dent. New Jersey, New Jersey Med. Sch., Newark, NJ 07103, United States.
SOURCE: Clinical Orthopaedics and Related Research, (1981) Vol. No. 160, pp. 268-278.
ISSN: 0009-921X CODEN: CORTBR
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 033 Orthopedic Surgery
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Dec 1991
Last Updated on STN: 9 Dec 1991

AB Soft tissue structures can be replaced by a filamentous carbon-polylactic acid polymer tissue scaffold. A successful replacement requires a secure bond between the synthetic material and living soft tissue. This attachment has been investigated in a rabbit model. In 23 male, white New Zealand rabbits, the proximal third of the Achilles tendon of one hind leg was resected. Seventeen of these rabbits received composite tendon implants; six received no implants and served as shams. In all cases, the contralateral limb served as an unoperated control. Biological fixation of the synthetic material to the tendinous and myotendinous tissues of the rabbit gastrocnemius system was achieved. This occurred by ingrowth of soft tissue into the 7μ carbon fiber network. This bond developed rapidly and was mechanically secure under physiologic loading conditions. The anastomoses' strengths were tested in tension over a 12-week period and compared to the breaking strengths of their contralateral, unoperated gastrocnemius systems and the sham systems. After four weeks, the systems with implants had strengths equivalent to those of the unoperated systems. Sham systems were significantly weaker throughout the test period. Histologically, the ingrowth process was associated with little inflammatory response. The ingrown tissue was found to be highly cellular with collagen oriented longitudinally to the tendon. After 12 weeks, the volume of collagenous tissue making up the regrown tendon section appeared nearly normal. Secure biological fixation of the carbon-polylactic acid

scaffold to soft tissues may allow its application in repair or replacement of tendon or ligament deficits.

L12 ANSWER 35 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1979128312 EMBASE Full-text
TITLE: Macroscopic, microscopic, and mechanical analyses of prototype double velour vascular grafts.
AUTHOR: Holub, D.A.; Trono, R.; Klima, T.; Norman, J.C.
CORPORATE SOURCE: Cardiovasc. Surg. Res. Lab., Dept. Surg., Texas Heart Inst., St Luke's Episc. Hosp., Houston, Tex., United States .
SOURCE: Cardiovascular Diseases, (1978) Vol. 5, No. 4, pp. 365-383.
ISSN: 0093-3546 CODEN: CADIDW
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
005 General Pathology and Pathological Anatomy
LANGUAGE: English
AB In-vivo and ex-vivo evaluations of two prototype double velour tube grafts have been conducted. The experimental grafts were fabricated from terry cloth derivatives of the Dacron polyester material that is used in the construction of presently available Microvel Double Velour and Cooley Double Velour Guidelina grafts. The use of terry cloth derivatives in the experimental grafts provides a velour pile that is more uniform in height and density than current clinical grafts. The hypothesis examined by these studies was whether the utilization of terry cloth derivatives provides a more perfect capsular and luminal surface for fibrous tissue attachment and ingrowth, thereby enhancing neointimal formation at the blood contacting surface. Using standard techniques, prototype grafts were implanted in the abdominal aortas of dogs for test periods of 1 to 6 months. All grafts remained patent throughout the healing period. At explanation, the macroscopic and microscopic properties of the grafts were examined aand characterized. Neointimal analysis demonstrated that the lighter denier, higher porosity prototype consistently produced more homogeneous blood-contacting surfaces with smoother contours and more complete endothelialization than the heavier denier, lower porosity prototype. From these analyses, the authors can conclude that both prototype grafts possess the basic properties of useful arterial prostheses. They are not prone to early thrombosis, and exhibit rapid healing properties. This study indicates that the use of terry cloth derivatives provides a more uniform, less random velour pile and that arterial grafts constructed from such materials produce more uniform and biologically stable neointimas.

L12 ANSWER 36 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 0048792034 EMBASE Full-text
TITLE: Tendon suture to bone. An experimental investigation in rabbits.
AUTHOR: Forward, A.D. (correspondence); Cowan, R.J.
CORPORATE SOURCE: Trauma Res. Unit, Dept. of Surg., Univ. of British Columbia, Vancouver, BC, Canada.
SOURCE: J. BONE JT SURG., (1963) Vol. 45 A, No. 4, pp. 807-823.
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: CLASSIC

LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: Jun 2010
Last Updated on STN: Jun 2010

AB The healing of tendon to bone parallels the healing of tendon to tendon as measured by tensile strength, and the like, but histologie ally tendon-to-bone healing differe in that it resembles the healing of an undieplaced fracture. Anchorage of tendon to bone is effected first by a temporary attachment formed by a connective-tissue sleeve which surrounds and adheres to the inserted portion of the tendon and weaves in between the intact bone trabeculae of the marrow cavity. From the present in-vestigation it was impossible to determine the origin of the fibroblasts of the con-nective-tissue sleeve surrounding the implanted tendon. Whether they originate from the endotenon or from primitive reticular cells of the haemopoietic system, as suggested by Whiston and Walmsley, is controversial. This temporary process is maximum 2 to 3 weeks after implantation. Permanent mooring of tendon to the bone is effected by actual ingrowth of bone tissue into the implanted tendon and the formation of a rough-walled bone tube about the implanted tendon. The collagen fibres of the implanted tendon attach directly to and become buried in the osseous tissue. These collagen fibres resemble the Sharpey fibres seen in normal tendon-to-bone insertions. In rabbits the 2 best all-around techniques of tendon-to-bone suture appear to be the Mason-Alien and Pulver tait methods. From the point of view of tissue reaction and separation of the tendon-to-bone attachment, the Bun-nell wire-pull-out-one-cortex method is superior to the Pulvertaft technique. Along with the Mason-Alien method, this Bunnell technique has the greatest application in tendon fixation at, the distal phalanx. There was no significant separation during a three-week period of immobilization. After removal of the casts and commence-ment of unrestricted use, there was a definite increase in separation with 5 of the 8 methods studied. This would tend to support the work of Lindsay and Thomson and Lindsay, Thomson, and Walker, who suggested that a more prolonged period of immobilization (longer than three weeks) following tendon suture may be indica-ted. Adhesions are more dense in direct tendon-to-bone suture than in tendon-to-tendon suture. However, in the tendon-to-bone suture the adhesions are formed closer to the bone insertion and, therefore, interfere less with the function of the tendon. This is an important point to consider when attaching tendons to the distal phalanx of a finger because the capsule and the volar plate of the distal interphalan-geal joint are close to the insertion of the flexor digitorum profundus tendon. On this basis, the Bunnell wire-pull-out-one-cortex method appears to be the method of choice. There is no difference between inserting the tendon through one or both cortices. This may be explained by the formation of a rough floor in the bone tube which provides attachment comparable to that which the tendon obtains in the distal cortex when the tendon is passed through both cortices. To apply this knowledge to the human hand, it would seem that when inserting tendon into bone the cortex should be removed, or at least elevated, over an area large enough to allow im-plantation of the tendon into the cancellous bone. That is to say 'a core of volar cortex' should be removed and not merely 'an osteoperiosteal flap' raised.

L12 ANSWER 37 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 0047644929 EMBASE Full-text
TITLE: TENDON SUTURE to BONE. AN EXPERIMENTAL INVESTIGATION in RABBITS.
AUTHOR: Forward, A.D. (correspondence); Cowan, R.J.
CORPORATE SOURCE: Trauma Res. Unit, Dept. of Surg., Univ. of British Columbia, Vancouver.

SOURCE: J, BONE JT SURG., (1963) pp. 807-823.
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: CLASSIC
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: Jun 2010
Last Updated on STN: Jun 2010

AB The healing of tendon to bone parallels the healing of tendon to tendon as measured by tensile strength, and the like, but histologically tendon-to-bone healing differs in that it resembles the healing of an undisplaced fracture. Anchorage of tendon to bone is effected first by a temporary attachment formed by a connective-tissue sleeve which surrounds and adheres to the inserted portion of the tendon and weaves in between the intact bone trabeculae of the marrow cavity. From the present investigation it was impossible to determine the origin of the fibroblasts of the connective-tissue sleeve surrounding the implanted tendon. Whether they originate from the endotenon or from primitive reticular cells of the haemopoietic system, as suggested by Whiston and Walmaley, is controversial. This temporary process is maximum 2 to 3 weeks after implantation. Permanent mooring of tendon to the bone is effected by actual ingrowth of bone tissue into the implanted tendon and the formation of a rough-walled bone tube about the implanted tendon. The collagen fibres of the implanted tendon attach directly to and become buried in the osseous tissue. These collagen fibres resemble the Sharpey fibres seen in normal tendonto-bone insertions. Ih rabbits the 2 best all-around techniques of tendon-to-bone suture appear to be the Mason-Alien and Pulvertaft methods. From the point of view of tissue reaction and separation of the tendon-to-bone attachment, the Bunnell wire-pull-out-one-cortex method is superior to the Pulvertaft technique. Along with the Mason-Alien method, this Bunnell technique has the greatest application in tendon fixation atJhe distal phalanx. There was no significant separation during a three-week period of immobilisation. After removal of the casts and commencement of unrestricted use. there was a definite increase in separation with 5 of the 8 methods studied. This would tend to support the work of Luudeay sssa Thomson and Ldndsay, Thomson, and Walker, who suggested that a more prolonged period of immobilization (longer than three weeks) following tendon suture may be indicated. Adhesions are more dense in direct tendon-to-bone suture than in tendon-totendon suture. However, in the tendon-to-bone suture the adhesions are formed closer to the bone insertion and, therefore, interfere less with the function of the tendon. This is an important point to consider when attaching tendons to the distal phalanx of a finger because the capsule and the volar plate of the distal interphalangeal joint are close to the insertion of the flexor digitorum profundus tendon. On this basis, the Bunnell wire-pull-out-one-cortex method appears to be the method of choice.. There is no difference between inserting the tendon through one or both cortices. Hue may be explained by the formation of a rough floor in the bone tube which provides attachment comparable to that which the tendon obtains in the distal cortex when the tendon is passed through both cortices. To apply this knowledge to the human hand, it would seem that when inserting tendon into bone the cortex should be removed, or at least elevated, over an area large enough to allow implantation of the tendon into the cancellous bone. That is to say 'a core of volar cortex should be removed and not merely 'an osteoperiosteal flap' raised.

L12 ANSWER 38 OF 177 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 0047216750 EMBASE Full-text
TITLE: The lucite calvarium for direct observation of the brain in monkeys (Modified methods for installing large and small

removable windows by indirect fixation).
AUTHOR: Minard, D. (correspondence); Osserman, E.F.; Howell, S.R.
CORPORATE SOURCE: Naval Med. Res Inst., Nat. Naval Med. Center, Bethesda, MD, United States.
SOURCE: Anatomical Record, (1954) Vol. 120, No. 1, pp. 317-327.
ISSN: 0003-276X
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: CLASSIC
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: Jun 2010
Last Updated on STN: Jun 2010

AB This paper contains the description of a modified 4-stage procedure for preparing the lucite calvarium in rhesus monkeys earlier used by Shelden e.a. (1944). A molded window is bolted to a grooved ticonium metal ring or cemented to a lucite ring previously implanted on the skull. Furthermore, a one-stage procedure for installing removable one-inch lucito windows in one or both parietal areas of monkeys by means of permanently attached prefabricated vitallium rings is described. By these, control of cerebrospinal fluid leakage is greatly improved. Special techniques having been employed for viewing the pial vessels were slit lamp illumination, the surface reflecting microscope, which has proved of special value in the examination of the small windows which can be made optically flat, and ultraviolet illumination by which the passage of sodium fluorescein through the exposed pial vessels can be readily studied. In most preparations infection sooner or later takes place but in the absence of this the useful period for examination is limited only by the gradual ingrowth of fibrous tissue . In the present preparations, however, this is easily corrected by detaching the window, excising the new membrane and replacing the window. To control infection one has to control leakage of cerebrospinal fluid first. The procedures of other authors are mentioned and discussed. Examples of investigations are given in which the procedures described are the methods of choice.

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ACCESSION NUMBER: 0011178799 EMBASE Full-text
COPYRIGHT: MEDLINE® is the source for the citation and abstract of this record.
TITLE: [Integration of orbitary polyethilene implants (MEDPOR). Histologic study].
Integracion de los implantes orbitarios de polietileno (MEDPOR). Estudio histologico..
AUTHOR: Nunez Sanchez, A. (correspondence); Reche Sainz, J.A.; Sanz Lopez, A.; Mateos Sanchez, E.; Garcia Llanes, G.; San Miguel Fraile, P.; Fernandez Escamez, C.S.
CORPORATE SOURCE: Hospital Ramon y Cajal, Madrid, Espana..
SOURCE: Archivos de la Sociedad Espanola de Oftalmologia, (Jan 2001) Vol. 76, No. 1, pp. 25-29.
ISSN: 0365-6691
COUNTRY: Spain
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: MEDLINE
LANGUAGE: Spanish; Castilian
ENTRY DATE: Entered STN: Mar 2010
Last Updated on STN: Mar 2010

AB PURPOSE: We study the histological integration of high-density porous polyethylene orbital implants and its clinical meaning. METHODS: During the

last 16 months we have used 14 implants of MEDPOR. Two were removed because of migration, the first one and partial extrusion, the second one, after 3 and 9 months since implantation , respectively. They were preserved and softened in formaldehyde for one month, and later processed for histological study. RESULTS: Macroscopically, a fibrous pseudocapsule firmly attached to the implant was seen. A fibrovascular tissue ingrowth covered the polyethylene porous surface and penetrated its total cross-sectional area. Occasional inflammatory cells were present. There was no evidence of macrophagical activity. CONCLUSIONS: We demonstrate a good fibrovascular integration of the implant at the time of extraction. This means that this material can be successfully used in anophthalmic socket surgery. However, new pathological and clinical studies are necessary to elucidate their biocompatibility in long follow-up time.

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ACCESSION NUMBER: 001045312 7 EMBASE Full-text
COPYRIGHT: MEDLINE® is the source for the citation and abstract of this record.
TITLE: Evaluation of initial attachment of human gingival fibroblast cells to biodegradable membranes in vitro by light and scanning electron microscopy..
AUTHOR: Unsal, B. (correspondence); Ozcan, G.; Tuter, G.; Kurtis, B.; Yalim, M.
CORPORATE SOURCE: Department of Periodontology, Faculty of Dentistry, Gazi University, Ankara, Turkey..
SOURCE: Journal of oral science, (Jun 1999) Vol. 41, No. 2, pp. 57-60.
ISSN: 1343-4934
COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: MEDLINE
LANGUAGE: English
ENTRY DATE: Entered STN: Mar 2010
Last Updated on STN: Mar 2010

AB Guided tissue regeneration procedures using resorbable membranes have become accepted therapy for treating periodontal defects. Resorbable collagen and synthetic polylactide and polyglycolide copolymer membranes have been found to support regeneration and preclude the need for surgical removal. This study was undertaken to assess and compare the initial attachment of human gingival fibroblast cells to four collagen-based membranes (fascia lata, fascia temporalis, dura mater, and Type I bovine collagen) and a synthetic polylactic acid-based membrane (resolut). Human gingival fibroblasts were grown from explants of normal tissue obtained during surgical reduction of retromolar tissues. Membrane specimens were placed in separate culture wells and incubated with fibroblasts for one hour. The number of adherent cells was evaluated by light microscopy using an ocular grid system and detailed examination was performed by scanning electron microscopy. The results of evaluation by light microscopy indicated that initial cell attachment was significantly less in the polylactic acid-based membrane group than in the collagen-based membrane groups ($P < 0.01$). However, no significant differences were found among the collagen membrane groups in terms of fibroblast attachment ($P > 0.01$). Scanning electron microscopy examination of fibroblasts cultured directly on barrier membranes indicated that the collagen-based membranes appeared to facilitate cell attachment , whereas the polylactic acid-based membrane exhibited a morphology that was not conducive to attachment of human gingival fibroblasts. Based on

these limited in vitro results, it appears that collagen-based membranes offer greater potential than polylactic acid-based membranes for guided tissue regeneration at surgical sites.

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ACCESSION NUMBER: 0010093526 EMBASE Full-text
COPYRIGHT: MEDLINE® is the source for the citation and abstract of this record.
TITLE: New attachment achieved by guided tissue regeneration using a bioresorbable polylactic acid membrane in dogs..
AUTHOR: Sallum, E.A. (correspondence); Sallum, A.W.; Nociti Jr., F.H.; Marcantonio, R.A.; de Toledo, S.
CORPORATE SOURCE: Department of Periodontics, Faculty of Odontology of Piracicaba, University of Campinas, Sao Paulo, Brazil.. easallum@fop.unicamp.br
SOURCE: The International journal of periodontics & restorative dentistry, (Oct 1998) Vol. 18, No. 5, pp. 502-510.
ISSN: 0198-7569
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: MEDLINE
LANGUAGE: English
ENTRY DATE: Entered STN: Mar 2010
Last Updated on STN: Mar 2010

AB Created periodontal defects in dogs were randomly assigned for experimental (Guidor bioresorbable membranes) or control (conventional therapy) treatment. The results showed that the new connective tissue attachment was significantly greater in test sites than in controls. This new attachment averaged 2.79 +/- 0.74 mm and 1.47 +/- 0.20 mm at test and control sites, respectively (P < 0.05). Epithelial downgrowth was also reduced in the test sites (P < 0.05). No differences in bone response were found. The bioresorbable barrier was effective in blocking gingival epithelial downgrowth and connective tissue proliferation, promoting new attachment according to the principles of guided tissue regeneration.

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ACCESSION NUMBER: 0002338027 EMBASE Full-text
COPYRIGHT: MEDLINE® is the source for the citation and abstract of this record.
TITLE: Evaluation of connective tissue cell responses to orthopaedic implant materials..
AUTHOR: Goldring, S.R. (correspondence); Flannery, M.S.; Petrison, K.K.; Evins, A.E.; Jasty, M.J.
CORPORATE SOURCE: Department of Medicine, Harvard Medical School, Boston, MA. .
SOURCE: Connective tissue research, (1990) Vol. 24, No. 1, pp. 77-81.
ISSN: 0300-8207
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: MEDLINE
LANGUAGE: English
ENTRY DATE: Entered STN: Mar 2010

Last Updated on STN: Mar 2010

AB We have developed an in vitro cell culture model to examine the interaction between connective tissue cells and orthopaedic implant biomaterials. Human connective tissue cells grown on different materials exhibit distinct responses in terms of attachment, morphology, proliferative capacity and matrix biosynthesis. Our results closely complement in vivo observations concerning biocompatibility and demonstrate the usefulness of this in vitro system for evaluating biomaterials. More importantly, this model can be used to define the specific cellular and biochemical processes that are responsible for the local tissue responses to orthopaedic implant materials.

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ACCESSION NUMBER: 0001817058 EMBASE Full-text
COPYRIGHT: MEDLINE® is the source for the citation and abstract of this record.
TITLE: [Periodontal treatment after the method of guided periodontal tissue regeneration].
Parodontaltherapie nach der gesteuerten parodontalen Geweberegeneration..
AUTHOR: Flores-de-Jacoby, L. (correspondence)
CORPORATE SOURCE: Universitatsklinik Marburg, Abteilung fur Parodontologie..
SOURCE: Deutsche zahnarztliche Zeitschrift, (Jun 1991)
Vol. 46, No. 6, pp. 390-393.
Refs: 48
ISSN: 0012-1029
COUNTRY: Germany
DOCUMENT TYPE: Journal; General Review; (Review)
FILE SEGMENT: MEDLINE
LANGUAGE: German
ENTRY DATE: Entered STN: Mar 2010
Last Updated on STN: Mar 2010

AB Results of studies on animal models have shown that only guided periodontal tissue regeneration (GTR) will induce growth of new connective tissue fibers attached to new zement and bone tissue when the root surface had been exposed to plaque or pocket organisms. Studies of various authors suggest that it is exclusively the progenitor cells in the still existing periodontal ligament that permit regeneration. The development of GTR is based on biological principles. In the beginning its application was limited to periodontal surgery and has meanwhile expanded to include other areas such as implantology and oral surgery. Best results can be achieved in the periodontological treatment of three-walled bone defects and class II furcation involvements according to the data of several studies.

L12 ANSWER 44 OF 177 Elsevier Biobase COPYRIGHT 2010 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1998012322 ESBIOBASE Full-text
TITLE: Advances in tissue engineering of blood vessels and other tissues
AUTHOR(S): E. Niklason, Laura; S. Langer, Robert
CORPORATE SOURCE: E. Niklason, Laura (Dept. Anaesthesia and Critical Care, Massachusetts General Hospital, Boston, MA (US), Boston, MA 02114 (US)); E. Niklason, Laura; S. Langer, Robert (Department of Chemical Engineering, Massachusetts Inst. of Technology, Cambridge, MA (US))
SOURCE: Transplant Immunology (Dec 1997) Volume 5, Number 4, pp. 303-306, 30 refs.

CODEN: TRIME2 ISSN: 0966-3274
DOI: 10.1016/S0966-3274(97)80013-5
COUNTRY OF PUBLICATION: United Kingdom
DOCUMENT TYPE: Journal; (Short Survey)
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 31 Jan 2009
Last updated on STN: 31 Jan 2009

AN 1998012322 ESBIOBASE Full-text

AB Tissue engineering is a new and rapidly expanding field, in which techniques are being developed for culturing a variety of tissues both in vitro and in vivo using polymer 'scaffolds' to support tissue growth. Polymer scaffolds used in tissue engineering are generally biodegradable, often involving compounds which are already approved for human implantation. In some cases, these polymers may be chemically modified to exhibit selective cell adhesion properties, which enhance cell attachment and subsequent tissue growth. Many cell types have been successfully cultured on these scaffolds, including smooth muscle cells, endothelial cells, hepatocytes and chondrocytes. Tissue engineering holds the potential for the in vitro development of autologous or allogeneic transplantable vascular conduits. Each year in the USA, there are approximately 1.4 million procedures performed which require arterial prostheses. Most of these procedures are in small calibre (< 6 mm) vessels , for which synthetic graft materials are not generally suitable. While autologous venous or arterial vessels are generally used, not all patients possess adequate conduit for revascularization. Tubular scaffolds have been specially designed for culturing small calibre arteries in vitro. Bovine aortic vascular cells were seeded and cultured on these polymer scaffolds, and grown under conditions of pulsatile pressure and intra-luminal flow. To minimize contamination during the weeks of tissue culture required to produce an arterial prosthesis, a sterile incubator system was developed. Preliminary studies have achieved good cell densities of both smooth muscle cells and endothelial cells on biodegradable polymer scaffolds.

L12 ANSWER 45 OF 177 LIFESCI COPYRIGHT 2010 CSA on STN

ACCESSION NUMBER: 2003:98629 LIFESCI Full-text
TITLE: Three-dimensional macroporous calcium phosphate bioceramics with nested chitosan sponges for load-bearing bone implants
AUTHOR: Zhang, Y.; Zhang, M.
CORPORATE SOURCE: Department of Materials Science & Engineering, 302L Roberts Hall, University of Washington, Seattle, Washington 98195-2120, USA; E-mail: mzhang@u.washington.edu
SOURCE: Journal of Biomedical Materials Research [J. Biomed. Mater. Res.], (20020700) vol. 61, no. 1, pp. 1-8.
ISSN: 0021-9304.
DOCUMENT TYPE: Journal
FILE SEGMENT: T
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Three-dimensional macroporous calcium phosphate bioceramics embedded with porous chitosan sponges were synthesized to produce composite scaffolds with high mechanical strength and a large surface/volume ratio for load-bearing bone repairing and substitutes. The macroporous calcium phosphate bioceramics with pore diameters of 300 mu m to 600 mu m were developed using a porogen burnout technique, and the chitosan sponges were formed inside the pores of the bioceramics by first introducing chiosan solution into the pores followed by a freeze-drying process. Our scanning electron microscopy results showed that the pore size of chitosan sponges formed inside the macroporous structure

of bioceramics was approximately 100 mu m, a structure favorable for bone tissue in-growth. The compressive modulus and yield stress of the composite scaffolds were both greatly improved in comparison with that of HA/ beta -TCP scaffolds. The simulated body fluid (SBF) and cell culture experiments were conducted to assess the bioactivity and biocompatibility of the scaffolds. In the SBF tests, a layer of randomly oriented needle-like apatite crystals formed on the scaffold surface after sample immersion in SBF, which suggested that the composite material has good bioactivity. The cell culture experiments showed that MG63 osteoblast cells attached to the composite scaffolds, proliferated on the scaffold surface, and migrated onto the pore walls, indicating good cell biocompatibility of the scaffold. The cell differentiation on the composite scaffolds was evaluated by alkaline phosphatase (ALP) assay. Compared with the control in tissue culture dishes, the cells had almost the same ALP activity on the composite scaffolds during the first 11 days of culture.

L12 ANSWER 46 OF 177 LIFESCI COPYRIGHT 2010 CSA on STN
ACCESSION NUMBER: 1998:50454 LIFESCI Full-text
TITLE: Advances in tissue engineering of blood vessels and other tissues
AUTHOR: Niklason, L.E.; Langer, R.S.
CORPORATE SOURCE: Department of Anaesthesia and Critical Care, Massachusetts General Hospital, Boston, MA 02114, USA
SOURCE: Transplant Immunol., (19970000) vol. 5, no. 4, pp. 303-306.
ISSN: 0966-3274.
DOCUMENT TYPE: Journal
TREATMENT CODE: General Review
FILE SEGMENT: W3
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Tissue engineering is a new and rapidly expanding field, in which techniques are being developed for culturing a variety of tissues both in vitro and in vivo using polymer 'scaffolds' to support tissue growth. Polymer scaffolds used in tissue engineering are generally biodegradable, often involving compounds which are already approved for human implantation. In some cases, these polymers may be chemically modified to exhibit selective cell adhesion properties, which enhance cell attachment and subsequent tissue growth. Many cell types have been successfully cultured on these scaffolds, including smooth muscle cells, endothelial cells, hepatocytes and chondrocytes. Tissue engineering holds the potential for the in vitro development of autologous or allogeneic transplantable vascular conduits. Each year in the USA, there are approximately 1.4 million procedures performed which require arterial prostheses. Most of these procedures are in small calibre (<6 mm) vessels, for which synthetic graft materials are not generally suitable. While autologous venous or arterial vessels are generally used, not all patients possess adequate conduit for revascularization. Tubular scaffolds have been specially designed for culturing small calibre arteries in vitro. Bovine aortic vascular cells were seeded and cultured on these polymer scaffolds, and grown under conditions of pulsatile pressure and intra-luminal flow. To minimize contamination during the weeks of tissue culture required to produce an arterial prosthesis, a sterile incubator system was developed. Preliminary studies have achieved good cell densities of both smooth muscle cells and endothelial cells on biodegradable polymer scaffolds.

L12 ANSWER 47 OF 177 LIFESCI COPYRIGHT 2010 CSA on STN
ACCESSION NUMBER: 95:47686 LIFESCI Full-text

TITLE: Temporomandibular joint disc replacement made by tissue-engineered growth of cartilage
AUTHOR: Puelacher, W.C.; Wisser, J.; Vacanti, C.A.; Ferraro, N.F.; Jaramillo, D.; Vacanti, J.P.
CORPORATE SOURCE: Dep. Oral and Maxillofac. Surg., Univ. Clin. Dental Med., Leopold Franzens Univ., Maximilianstrasse 10, 6020 Innsbruck, Austria
SOURCE: J. ORAL MAXILLOFAC. SURG., (1994) vol. 52, no. 11, pp. 1172-1177.
ISSN: 0278-2391.
DOCUMENT TYPE: Journal
FILE SEGMENT: T
LANGUAGE: English
SUMMARY LANGUAGE: English

AB To test the effectiveness of the new technique of tissue -engineered growth of cartilage, temporomandibular joint (TMJ) disc replacements were created by seeding dissociated chondrocytes on synthetic, three-dimensional, bioresorbable polymer constructs of a predetermined anatomic shape, incubating the cell-polymer constructs in vitro, and transplanting them into test animals. Twelve highly porous and bioresorbable cell-transplantation devices in the shape of TMJ discs were created using biodegradable polylactid and polyglycolic acid fibers. Bovine articular cartilage was dissociated into chondrocytes and the cells were allowed to attach to the three-dimensional polymer scaffolds and multiply in vitro. After 1 week, the cell-polymer constructs were implanted subcutaneously into nude mice. The neocartilage was assessed by magnetic resonance imaging (MRI) techniques, gross inspection, histology, and biomechanical and biochemical analysis after 12 weeks. All implants seeded with chondrocytes showed gross evidence of histologically organized hyaline cartilage. The scaffolds maintained their specific shape. They not only showed appropriate intrinsic stability during neomorphogenesis of cartilage in vitro and in vivo, but also seemed to guide the growth of cartilage. The presence of sulfated glycosaminoglycans was shown by aldehyde fuchsin alcian blue staining of the specimens. Type II collagen, considered to be indicative of cartilage formation, was found in the specimens tested. MRI showed signal characteristics similar to those of hyaline cartilage. Analysis of neocartilage force/displacement curves and aqueous phase compliance using a closed compression chamber suggested that the ability of the constructs to resist deformation was similar to that of native donor cartilage. The technology of tissue-engineered growth of cartilage on individually designed scaffolds may have many applications not only in reconstructive surgery of the TMJ, but also in craniomaxillofacial, plastic, and orthopedic surgery.

L12 ANSWER 48 OF 177 LIFESCI COPYRIGHT 2010 CSA on STN
ACCESSION NUMBER: 90:6585 LIFESCI Full-text
TITLE: Evaluation of connective tissue cell responses to orthopaedic implant materials.
AUTHOR: Goldring, S.R.; Flannery, M.S.; Petrison, K.K.; Evins, A.E.; Jasty, M.J.
CORPORATE SOURCE: Massachusetts Gen. Hosp. E., 149 The Navy Yard, 13th St., Charlestown, MA 02129, USA
SOURCE: CONNECT. TISSUE RES., (1990) vol. 24, no. 1, pp. 77-81.
DOCUMENT TYPE: Journal
FILE SEGMENT: T
LANGUAGE: English
SUMMARY LANGUAGE: English

AB We have developed an in vitro cell culture model to examine the interaction between connective tissue cells and orthopaedic implant biomaterials. Human

connective tissue cells grown on different materials exhibit distinct responses in terms of attachment, morphology, proliferative capacity and matrix biosynthesis. Our results closely complement in vivo observations concerning biocompatibility and demonstrate the usefulness of this in vitro system for evaluating biomaterials. More importantly, this model can be used to define the specific cellular and biochemical processes that are responsible for the local tissue responses to orthopaedic implant materials.

L12 ANSWER 49 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:458916 SCISEARCH Full-text
THE GENUINE ARTICLE: 556GA
TITLE: Three-dimensional macroporous calcium phosphate bioceramics with nested chitosan sponges for load-bearing bone implants
AUTHOR: Zhang M Q (Reprint)
CORPORATE SOURCE: Univ Washington, Dept Mat Sci & Engn, 302L Roberts Hall, Seattle, WA 98195 USA (Reprint)
E-mail: mzhang@u.washington.edu
AUTHOR: Zhang Y
CORPORATE SOURCE: Univ Washington, Dept Mat Sci & Engn, Seattle, WA 98195 USA
COUNTRY OF AUTHOR: USA
SOURCE: JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, (JUL 2002) Vol. 61, No. 1, pp. 1-8.
ISSN: 0021-9304.
PUBLISHER: JOHN WILEY & SONS INC, 111 RIVER ST, HOBOKEN, NJ 07030 USA
.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 34
ENTRY DATE: Entered STN: 14 Jun 2002
Last Updated on STN: 20 Nov 2008
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Three-dimensional macroporous calcium phosphate bioceramics embedded with porous chitosan sponges were synthesized to produce composite scaffolds with high mechanical strength and a large surface/volume ratio for load-bearing bone repairing and substitutes. The macroporous calcium phosphate bioceramics with pore diameters of 300 mum to 600 mum were developed using a porogen burnout technique, and the chitosan sponges were formed inside the pores of the bioceramics by first introducing chiosan solution into the pores followed by a freeze-drying process. Our scanning electron microscopy results showed that the pore size of chitosan sponges formed inside the macroporous structure of bioceramics was approximately 100 mum, a structure favorable for bone tissue in-growth. The compressive modulus and yield stress of the composite scaffolds were both greatly improved in comparison with that of HA/beta-TCP scaffolds. The simulated body fluid (SBF) and cell culture experiments were conducted to assess the bioactivity and biocompatibility of the scaffolds. In the SBF tests, a layer of randomly oriented needle-like apatite crystals formed on the scaffold surface after sample immersion in SBF, which suggested that the composite material has good bioactivity. The cell culture experiments showed that MG63 osteoblast cells attached to the composite scaffolds, proliferated on the scaffold surface, and migrated onto the pore walls, indicating good cell biocompatibility of the scaffold. The cell differentiation on the composite scaffolds was evaluated by alkaline phosphatase (ALP) assay. Compared with the control in tissue culture dishes, the cells

had almost the same ALP activity on the composite scaffolds during the first 11 days of culture. (C) 2002 Wiley Periodicals, Inc.

L12 ANSWER 50 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 2001:250489 SCISEARCH Full-text
THE GENUINE ARTICLE: 413KL
TITLE: Tissue-engineered rotator cuff tendon using porcine small intestine submucosa - Histologic and mechanical evaluation in dogs
AUTHOR: Arnoczky S P (Reprint)
CORPORATE SOURCE: Michigan State Univ, Coll Vet Med, Lab Comparat Orthopaed Res, E Lansing, MI 48824 USA (Reprint)
AUTHOR: Dejardin L M; Ewers B J; Haut R C; Clarke R B
CORPORATE SOURCE: Michigan State Univ, Coll Osteopath Med, Orthopaed Biomech Lab, E Lansing, MI 48824 USA; DePuy Orthopaed Inc, Warsaw, IN USA
COUNTRY OF AUTHOR: USA
SOURCE: AMERICAN JOURNAL OF SPORTS MEDICINE, (MAR-APR 2001) Vol. 29, No. 2, pp. 175-184.
ISSN: 0363-5465.
PUBLISHER: AMER ORTHOPAEDIC SOC SPORT MED, 230 CALVARY STREET, WALTHAM, MA 02154 USA.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 48
ENTRY DATE: Entered STN: 6 Apr 2001
Last Updated on STN: 6 Apr 2001
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB To determine its efficacy in stimulating the regeneration of a rotator cuff tendon, an implant of 10-ply porcine small intestinal submucosa was used to replace a completely resected infraspinatus tendon in 21 adult mongrel dogs. The contralateral infraspinatus tendon was elevated and then reattached to the greater tubercle with sutures to mimic conventional repair (sham operation). Mechanical evaluations were performed at 0, 3, and 6 months (five specimens at each time period). Histologic comparisons were made at 3 and 6 months (three specimens). At both times, the gross appearance, histologic continuity, and failure mode of the constructs mimicked those of sham-operated and native infraspinatus tendons, thus suggesting host tissue ingrowth and implant remodeling with solid integration of the regenerated tissue to muscular and bony interfaces. Tissue ingrowth occurred without histologic evidence of foreign body or immune-mediated reactions or adhesions to peripheral tissues. Sham operations simulated tendon mobilization and reimplantation procedures routinely performed to treat chronic rotator cuff tendon injuries. Although the ultimate strength of small intestinal submucosa-regenerated tendons was significantly less than that of native infraspinatus tendons ($P < 0.001$), it was similar to that of reimplanted tendons at 3 ($P > 0.05$) and 6 months ($P > 0.05$).

L12 ANSWER 51 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 2001:147005 SCISEARCH Full-text
THE GENUINE ARTICLE: 399GM
TITLE: Novel synthetic selectively degradable vascular prostheses: A preliminary implantation study
AUTHOR: Cohn D (Reprint)

CORPORATE SOURCE: Hebrew Univ Jerusalem, Casali Inst Appl Chem, IL-91904 Jerusalem, Israel (Reprint)
AUTHOR: Izhar U; Schwalb H; Borman J B; Hellener G R; Hotoveli-Salomon A; Marom G; Stern T
CORPORATE SOURCE: Hadassah Univ Hosp, Joseph Lunenfeld Cardiac Surg Res Ctr, IL-91120 Jerusalem, Israel
COUNTRY OF AUTHOR: Israel
SOURCE: JOURNAL OF SURGICAL RESEARCH, (FEB 2001) Vol. 95, No. 2, pp. 152-160. ISSN: 0022-4804.
PUBLISHER: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 21
ENTRY DATE: Entered STN: 23 Feb 2001
Last Updated on STN: 23 Feb 2001
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Background. Vascular grafts perform less well than autologous arterial or vein grafts. The purpose of this study was to evaluate the short-term performance of selectively biodegradable filament-wound vascular prostheses, comprising elastomeric poly(ether urethane) (Lycra) scaffolds and flexible, hydrophilic biodegradable coatings. Materials and methods. Two types of selectively biodegradable vascular grafts were manufactured, comprising a filament-wound Lycra scaffold, subsequently coated with a biodegradable poly(ethylene glycol)/ poly(lactic acid) (PELA) block copolymer. The two types of grafts differed in both the overall porosity of the scaffold and the hydrophilicity of the biodegradable constituent. A 60-mm-long and 6-mm-diameter filament-wound and polytetrafluoroethylene (ePTFE) grafts were implanted as interposition prostheses, randomly, at the right- and left-side carotid arteries. Results. Implantation studies proved the grafts to be patent and pulsatile for periods of up to 3 months. Increasing the scaffold porosity and enhancing the hydrophilicity of the biodegradable component improved both the transmural tissue ingrowth process and the vascularization of the prosthesis wall. Also, a well-adhered peripheral tissue and a thin, uniform intima and endothelial lining were obtained.
All ePTFE graft controls, although patent, were rather stiff and nonpulsatile. A thick pseudointima, poorly attached to the prosthesis inner surface, was observed. The compliance of the wet grafts was significantly higher than in the dry state, stemming mainly from the water-plasticizing effect on the biodegradable component. The grafts explanted after a period of 6 weeks exhibited compliance only slightly lower than that of the wet grafts. After 12 weeks, however, the hoop compliance was 20% lower than that prior to implantation. At 100 mm Hg, for example, the original compliance of the wet graft was 2.5%/100 mm Hg decreasing to 2.0%/100 mm Hg after a 3-month implantation. The compliance reduction with implantation is attributed to the ingrowth of the perigraft tissue as revealed by the histological study. A compliance of 2.0%/100 mm Hg is slightly better than that of a standard PTFE graft with an original compliance of 1.6%/ 100 mm Hg. Yet it is still an order of magnitude smaller than that of a canine carotid artery. Conclusions. The improved mechanical properties and enhanced healing of the highly porous filament wound Lycra scaffold graft coated with hydrophilic biodegradable PELA has the potential of being a highly effective small caliber prosthetic graft. (C) 2000 Academic Press.

L12 ANSWER 52 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 2000:741611 SCISEARCH Full-text
THE GENUINE ARTICLE: 358UY
TITLE: Fibrous tissue ingrowth and attachment to porous tantalum
AUTHOR: Hacking S A (Reprint)
CORPORATE SOURCE: Jo Miller Orthopaed Res Lab, LSI-409, 1650 Cedar Ave, Montreal, PQ H3G 1A4, Canada (Reprint)
AUTHOR: Bobyn J D; Toh K K; Tanzer M; Krygier J J
CORPORATE SOURCE: Jo Miller Orthopaed Res Lab, Montreal, PQ H3G 1A4, Canada; McGill Univ, Div Orthopaed, Montreal, PQ H3A 1A1, Canada; McGill Univ, Montreal Gen Hosp, Dept Surg, Montreal, PQ H3G 1A4, Canada; McGill Univ, Dept Biomed Engn, Montreal, PQ H3A 2B4, Canada
COUNTRY OF AUTHOR: Canada
SOURCE: JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, (15 DEC 2000) Vol. 52, No. 4, pp. 631-638. ISSN: 0021-9304.
PUBLISHER: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012 USA.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 51
ENTRY DATE: Entered STN: 2000
Last Updated on STN: 2000

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB This study determined the soft tissue attachment strength and extent of ingrowth to a porous tantalum biomaterial. Eight dorsal subcutaneous implants (in two dogs) were evaluated at 2, 8, and 16 weeks. Upon retrieval, all implants were surrounded completely by adherent soft tissue. Implants were harvested with a tissue flap on the cutaneous aspect and peel tested in a servo-hydraulic tensile test machine at a rate of 5 mm/min. Following testing, implants were dehydrated ed in a solution of basic fuschin, defatted, embedded in methylmethacrylate, and processed for thin-section histology. At 4, 8, and 16 weeks, the attachment strength to porous tant alum was 61, 71, and 89 g/mm respectively. Histologic analysis showed complete tissue ingrowth throughout the porous tantalum implant. Blood vessels were visible at the interface of and within the porous tantalum material. Tissue maturity and vascularity increased with time. The tissue attachment strength to porous tantalum was three- to six-fold greater than was reported in a similar study with porous beads. This study demonstrated that porous tantalum permits rapid ingrowth of vascularized soft tissue, and attains soft tissue attachment strengths greater than with porous beads. (C) 2000 John Wiley & Sons, Inc.

L12 ANSWER 53 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:199625 SCISEARCH Full-text
THE GENUINE ARTICLE: 174YL
TITLE: Genes associated with embryonic attachment and implantation and the role of progesterone
AUTHOR: Giudice L C (Reprint)
CORPORATE SOURCE: Stanford Univ, Sch Med, Div Reprod Endocrinol & Infertil, 300 Pasteur Dr, HH333, Stanford, CA 94305 USA (Reprint)
AUTHOR: Giudice L C (Reprint)
CORPORATE SOURCE: Stanford Univ, Sch Med, Div Reprod Endocrinol & Infertil,

Stanford, CA 94305 USA; Stanford Univ, Ctr Res Womens Hlth & Reprod Med, Stanford, CA 94305 USA
COUNTRY OF AUTHOR: USA
SOURCE: JOURNAL OF REPRODUCTIVE MEDICINE, (FEB 1999) Vol. 44, No. 2, Supp. [S], pp. 165-171. ISSN: 0024-7758.
PUBLISHER: SCI PRINTERS & PUBL INC, PO DRAWER 12425 8342 OLIVE BLVD, ST LOUIS, MO 63132 USA.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 32
ENTRY DATE: Entered STN: 1999
Last Updated on STN: 1999

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Implantation in humans is a complex process theft involves embryo apposition and attachment to the maternal endometrial epithelium, traversing adjacent cells of the epithelial lining and invasion into the endometrial stroma. These processes involve a variety of molecules that are not unique in themselves but play unique roles in the process of implantation. Genes important to embryonic attachment include the epidermal growth factor (EGF)family (EGF, heparin-binding EGF-like growth factor and amphiregulin) and the cytokines (colony-stimulating factor, leukemia inhibitory factor and interleukin-1), as well as a variety of cell adhesion Molecules and other glycoproteins. Epithelial factors important in attachment may be regulated by paracrine interactions via the endometrial epithelium and the endometrial stroma, which is a progesterone-responsive tissue. Investigations into genetic knockout animal models and natural mutations in the mouse have demonstrated that genes important to the implantation process affect both embryo attachment and decidualization and include cyclooxygenase-2 and the homeobox gene HOXA-10. Calcitonin is believed to play a role in preparing the apical cell pole for contact with the trophoblast. A number of factors contribute to endometrial regulation by progesterone; some are important in embryo attachment as well as in the invasive phase of implantation. Four specific factors regulated in the endometrial stroma by progesterone are transforming growth factor-beta, interleukin-1 and insulin-like growth factor binding protein-1, tissue inhibitors of metalloproteinases (TIMPs) (especially TIMP-3) and fibronectin, all of which have been demonstrated to inhibit trophoblast invasiveness. Current research should provide answers regarding the effects of various levels of progesterone on the implantation process.

L12 ANSWER 54 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1998:69240 SCISEARCH Full-text
THE GENUINE ARTICLE: YQ775
TITLE: Advances in tissue engineering of blood vessels and other tissues
AUTHOR: Niklason L E (Reprint)
CORPORATE SOURCE: Massachusetts Gen Hosp, Dept Anaesthesia & Crit Care, Boston, MA 02114 USA (Reprint)
AUTHOR: Langer R S
CORPORATE SOURCE: MIT, Dept Chem Engn, Cambridge, MA 02139 USA
COUNTRY OF AUTHOR: USA
SOURCE: TRANSPLANT IMMUNOLOGY, (DEC 1997) Vol. 5, No. 4, pp. 303-306. ISSN: 0966-3274.
PUBLISHER: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM,

NETHERLANDS.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 30
ENTRY DATE: Entered STN: 1998
Last Updated on STN: 1998
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Tissue engineering is a new and rapidly expanding field, in which techniques are being developed for culturing a variety of tissues both in vitro and in vivo using polymer 'scaffolds' to support tissue growth. Polymer scaffolds used in tissue engineering are generally biodegradable, often involving compounds which are already approved for human implantation. In some cases, these polymers may be chemically modified to exhibit selective cell adhesion properties, which enhance cell attachment and subsequent tissue growth. Many cell types have been successfully cultured on these scaffolds, including smooth muscle cells, endothelial cells, hepatocytes and chondrocytes. Tissue engineering holds the potential for the in vitro development of autologous or allogeneic transplantable vascular conduits. Each year in the USA, there are approximately 1.4 million procedures performed which require arterial prostheses. Most of these procedures are in small calibre (<6 mm) vessels, for which synthetic graft materials are not generally suitable. While autologous venous or arterial vessels are gener ally used, not all patients possess adequate conduit for revascularization. Tubular scaffolds have been specially designed for culturing small calibre arteries in vitro. Bovine aortic vascular cells were seeded and cultured on these polymer scaffolds, and grown under conditions of pulsatile pressure and intra-luminal flow. To minimize contamination during the weeks of tissue culture required to produce an arterial prosthesis, a sterile incubator system was developed. Preliminary studies have achieved good cell densities of both smooth muscle cells and endothelial cells on biodegradable polymer scaffolds.

L12 ANSWER 55 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:547634 SCISEARCH Full-text
THE GENUINE ARTICLE: RQ218
TITLE: DELETION OF BETA-1 INTEGRINS IN MICE RESULTS IN INNER CELL MASS FAILURE AND PERIMPLANTATION LETHALITY
AUTHOR: STEPHENS L E (Reprint); SUTHERLAND A E; KLIMANSKAYA I V; ANDRIEUX A; MENESES J; PEDERSEN R A; DAMSKY C H
CORPORATE SOURCE: UNIV CALIF SAN FRANCISCO, DEPT STOMATOL, SAN FRANCISCO, CA 94143; UNIV CALIF SAN FRANCISCO, DEPT ANAT, SAN FRANCISCO, CA 94143; UNIV CALIF SAN FRANCISCO, RADIOBIOL LAB, SAN FRANCISCO, CA 94143
COUNTRY OF AUTHOR: USA
SOURCE: GENES & DEVELOPMENT, (1 AUG 1995) Vol. 9, No. 15, pp. 1883-1895.
ISSN: 0890-9369.
PUBLISHER: COLD SPRING HARBOR LAB PRESS, 1 BUNGTOWN RD, PLAINVIEW, NY 11724.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 48
ENTRY DATE: Entered STN: 1995
Last Updated on STN: 1995

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Integrin receptors for extracellular matrix receptors are important effecters of cell adhesion, differentiation, and migration in cultured cells and are believed to be critical effecters of these processes during development. To determine when beta 1 integrins become critical during embryonic development, we generated mutant mice with a targeted disruption of the beta 1 integrin subunit gene. Heterozygous mutant mice were normal. Homozygous loss of beta 1 integrin expression was lethal during early postimplantation development. Homozygous embryos lacking beta 1 integrins formed normal-looking blastocysts and initiated implantation at E4.5. However, the E4.5 beta 1-null embryos in situ had collapsed blastocoeles, and whereas the trophoblast penetrated the uterine epithelium, extensive invasion of the decidua was not observed. Laminin-positive endoderm cells were detected in the inner cell mass area, but endoderm morphogenesis and migration were defective. By E5.5 beta 1-null embryos had degenerated extensively. In vitro analysis showed that trophoblast function in beta 1-null peri- implantation embryos was largely normal, including expression of tissue-specific markers, and outgrowth on fibronectin- and vitronectin-coated, although not on laminin-coated substrates. In contrast, the inner cell mass region of beta 1-null blastocyst outgrowths, and inner cell masses isolated from beta 1-null blastocysts, showed highly retarded growth and defective extraembryonic endoderm morphogenesis and migration. These data suggest that beta 1 integrins are required for normal morphogenesis of the inner cell mass and are essential mediators of growth and survival of cells of the inner cell mass. Failure of continued trophoblast development in beta 1-null embryos after inner cell mass failure could be attributable to either an intrinsic requirement for beta 1 integrins for later stages of trophoblast development, or to the lack of trophic signals from the beta 1-null inner cell mass.

L12 ANSWER 56 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:466593 SCISEARCH Full-text
THE GENUINE ARTICLE: RH251
TITLE: PLATELET-DERIVED GROWTH FACTOR-MODULATED GUIDED TISSUE REGENERATIVE THERAPY
AUTHOR: CHO M I (Reprint)
CORPORATE SOURCE: SUNY BUFFALO, SCH DENT MED, DEPT ORAL BIOL, FOSTER HALL, BUFFALO, NY 14214 (Reprint)
AUTHOR: LIN W L; GENCO R J
CORPORATE SOURCE: SUNY BUFFALO, SCH DENT MED, PERIODONT DIS RES CTR, BUFFALO, NY 14214
COUNTRY OF AUTHOR: USA
SOURCE: JOURNAL OF PERIODONTOLOGY, (JUN 1995) Vol. 66, No. 6, pp. 522-530.
ISSN: 0022-3492.
PUBLISHER: AMER ACAD PERIODONTOLOGY, 737 NORTH MICHIGAN AVENUE, SUITE 800, CHICAGO, IL 60611-2690.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; CLIN
LANGUAGE: English
REFERENCE COUNT: 43
ENTRY DATE: Entered STN: 1995
Last Updated on STN: 1995

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB THE GOAL OF THIS STUDY WAS TO DEVELOP AN EFFECTIVE REGENERATIVE THERAPY capable of achieving periodontal regeneration of Class III furcation defects. We attempted to achieve this goal by combining three therapeutic approaches. First, the lesion was protected by an expanded polytetrafluoroethylene barrier membrane that prevents migration of gingival fibroblasts as well as osteogenic cells from the mucoperiosteal flaps. Second, platelet-derived growth factor-BE (PDGF-BB), which has potent chemotactic and mitogenic effects on periodontal ligament fibroblasts (PDL), was used to promote migration of fibroblasts and their proliferation on the root surface. Third, the root surface, demineralized by citric acid conditioning, was chosen as the primary site for PDGF-BB application. The demineralized root surface appeared to have the capability of providing a sustained release of the applied growth factor. This seemed to facilitate rapid repopulation of PDL fibroblasts on the root Surface and new PDL formation in the early stages of repair, which contributed to complete periodontal regeneration without root resorption and ankylosis in later stages. Combining these approaches, we developed a therapy referred to as ''PDGF-modulated guided tissue regenerative therapy.'' Unlike guided tissue regenerative therapy alone (without PDGF-BB), this therapy effectively promoted periodontal regeneration of Class III furcation defects in the beagle dog without significant ankylosis or root resorption.

L12 ANSWER 57 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:269774 SCISEARCH Full-text
THE GENUINE ARTICLE: QT488
TITLE: HEALING OF PERIODONTAL LESIONS IN MONKEYS FOLLOWING THE GUIDED TISSUE REGENERATION PROCEDURE - A HISTOLOGICAL STUDY
AUTHOR: SANDER L (Reprint)
CORPORATE SOURCE: AARHUS UNIV, FAC HLTH SCI, ROYAL DENT COLL, DEPT PERIODONTOL, VENNELYST BLVD, DK-8000 AARHUS C, DENMARK (Reprint)
AUTHOR: KARRING T
COUNTRY OF AUTHOR: DENMARK
SOURCE: JOURNAL OF CLINICAL PERIODONTOLOGY, (APR 1995) Vol. 22, No. 4, pp. 332-337. ISSN: 0303-6979.
PUBLISHER: MUNKSGAARD INT PUBL LTD, 35 NORRE SOGADE, PO BOX 2148, DK-1016 COPENHAGEN, DENMARK.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; CLIN
LANGUAGE: English
REFERENCE COUNT: 20
ENTRY DATE: Entered STN: 1995
Last Updated on STN: 1995
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The purpose of the present investigation was to study histologically the healing of periodontal lesions in monkeys during the first 9 weeks following periodontal reconstructive surgery according to the principle of guided tissue regeneration. Horizontal interproximal lesions and through-and-through bifurcation defects were surgically produced in 2 adult monkeys. Following removal of granulation tissue and root planing, notches indicating the level of the reduced bone level were prepared in the root surfaces. Sterile teflon membranes were then adjusted to cover the defects, and the gingival flaps were sutured in a coronally displaced position. Sacrifice of the animals was scheduled to

allow for observation periods of 1, 3, 4 and 9 weeks. Evaluation of histological specimens revealed a continuous growth of new connective tissue during a period of 4 weeks. The coronal growth of new tissue did not increase significantly between 4 and 9 weeks. New cementum had formed in the most apical part of one notch after 1 week of healing, and following 3 and 4 weeks, new cementum with inserting periodontal ligament fibers were observed in all notches and to a varying degree, also more coronally on the root surfaces of both interproximal and bifurcation defects. Limited regrowth of alveolar bone was observed in the 9-week specimens. Judged from the course of the blood vessels within the newly formed connective tissue in the defects, the tissue in the central part of the defects had originated from the alveolar bone, whereas the tissue adjacent to the root surfaces seemed to have its origin in the residual periodontal ligament.

L12 ANSWER 58 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:118794 SCISEARCH Full-text
THE GENUINE ARTICLE: QF980
TITLE: CELLULAR AND BACTERIAL-COLONIZATION OF BARRIER MEMBRANES UTILIZED FOR GUIDED BONE REGENERATION AROUND DENTAL IMPLANTS
AUTHOR: UNSAL E (Reprint); WALSH T F; HARRIS D; UNSAL M K; JOHNS R B
CORPORATE SOURCE: UNIV SHEFFIELD, SCH CLIN DENT, DEPT RESTORAT DENT, SHEFFIELD S10 2TA, S YORKSHIRE, ENGLAND; INST DENT IMPLANTS, SHEFFIELD S10 3BR, S YORKSHIRE, ENGLAND
COUNTRY OF AUTHOR: ENGLAND
SOURCE: CELLS AND MATERIALS, (1994) Vol. 4, No. 3, pp. 309-315.
ISSN: 1051-6794.
PUBLISHER: SCANNING MICROSCOPY INT, PO BOX 66507, AMF O'HARE, CHICAGO, IL 60666.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; ENGI
LANGUAGE: English
REFERENCE COUNT: 14
ENTRY DATE: Entered STN: 1995
Last Updated on STN: 1995
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB During dental implant surgery, it may not always be possible to ensure that all the coronal threads of the implant are within the bone. To overcome this defect and promote osteogenesis in areas of minimal bone/implant contact and prevent epithelial downgrowth or soft tissue ingrowth, expanded polytetrafluoroethylene (e-PTFE) membranes may be placed over the implants prior to repositioning the mucoperiosteal flap. The purpose of this study was to examine the surface characteristics of one type of e-PTFE membrane using scanning electron microscopy on material retrieved from sites where bone regeneration had been attempted. The membrane was removed between 4 and 7 months following placement. After fixation, the membranes were examined on both the inner (bony) and outer (soft tissue) aspects. No contamination with microbial organisms was seen except in two of the seven membranes which became exposed over the healing period. These showed bacterial colonies on both surfaces. In all specimens, a layer of fibrous connective tissue, attached cells, and inflammatory cells were observed. The morphology of the attached cells was similar on the inner and outer aspects of the membranes. Clinically, it was noted that the e-PTFE membrane was

effective in promoting bone growth over the implant threads where there was no communication with the oral environment. However, in those sites where the membrane had been exposed to the oral environment, bone growth had not occurred.

L12 ANSWER 59 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1994:736913 SCISEARCH Full-text
THE GENUINE ARTICLE: PQ778
TITLE: TEMPOROMANDIBULAR-JOINT DISC REPLACEMENT MADE BY TISSUE-ENGINEERED GROWTH OF CARTILAGE
AUTHOR: PUELACHER W C (Reprint); WISSER J; VACANTI C A; FERRARO N F; JARAMILLO D; VACANTI J P
CORPORATE SOURCE: HARVARD UNIV, CHILDRENS HOSP, SCH MED, BOSTON, MA 02115
COUNTRY OF AUTHOR: USA
SOURCE: JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY, (NOV 1994) Vol. 52, No. 11, pp. 1172-1177.
ISSN: 0278-2391.
PUBLISHER: W B SAUNDERS CO, INDEPENDENCE SQUARE WEST CURTIS CENTER, STE 300, PHILADELPHIA, PA 19106-3399.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: CLIN
LANGUAGE: English
REFERENCE COUNT: 34
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Objective: To test the effectiveness of the new technique of tissue-engineered growth of cartilage, temporomandibular joint (TMJ) disc replacements were created by seeding dissociated chondrocytes on synthetic, three-dimensional, bioresorbable polymer constructs of a predetermined anatomic shape, incubating the cell-polymer constructs in vitro, and transplanting them into test animals.
Materials and Methods: Twelve highly porous and bioresorbable cell-transplantation devices in the shape of TMJ discs were created using biodegradable polylactid and polyglycolic acid fibers. Bovine articular cartilage was dissociated into chondrocytes and the cells were allowed to attach to the three-dimensional polymer scaffolds and multiply in vitro. After 1 week, the cell-polymer constructs were implanted subcutaneously into nude mice. The neocartilage was assessed by magnetic resonance imaging (MRI) techniques, gross inspection, histology, and biomechanical and biochemical analysis after 12 weeks.
Results: All implants seeded with chondrocytes showed gross evidence of histologically organized hyaline cartilage. The scaffolds maintained their specific shape. They not only showed appropriate intrinsic stability during neomorphogenesis of cartilage in vitro and in vivo, but also seemed to guide the growth of cartilage. The presence of sulfated glycosaminoglycans was shown by aldehyde fuchsin alcian blue staining of the specimens. Type II collagen, considered to be indicative of cartilage formation, was found in the specimens tested. MRI showed signal characteristics similar to those of hyaline cartilage. Analysis of neocartilage force/displacement curves and aqueous phase compliance using a closed compression chamber suggested that the ability of the constructs to resist deformation was similar to that of native donor cartilage. Conclusion: The technology of tissue-engineered growth of cartilage on individually designed scaffolds may have many applications not only in reconstructive surgery of the TMJ, but also in craniomaxillofacial, plastic, and orthopedic surgery.

L12 ANSWER 60 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1994:704592 SCISEARCH Full-text
THE GENUINE ARTICLE: PP219
TITLE: INVASIVENESS OF MOUSE TROPHOBLASTIC CELLS IN CONNECTIVE-TISSUE
AUTHOR: BEVILACQUA E (Reprint)
CORPORATE SOURCE: UNIV SAO PAULO, INST CIENCIAS BIOMED, DEPT HISTOL & EMBRYOL, AV LINEU PRESTES 1524, BR-05508 SAO PAULO, BRAZIL (Reprint)
AUTHOR: ABRAHAMSOHN P A
COUNTRY OF AUTHOR: BRAZIL
SOURCE: ACTA ANATOMICA, (1994) Vol. 150, No. 4, pp. 246-252.
ISSN: 0001-5180.
PUBLISHER: KARGER, ALLSCHWILERSTRASSE 10, CH-4009 BASEL, SWITZERLAND.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 47
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Ectoplacental cones from 8-day-old mouse embryos were grafted into the dorsal subcutaneous tissue of host mice. The grafts were collected between the 3rd and 8th days after transfer and processed for morphological analysis by light and electron microscopy. Approximately 60% of the grafts formed hemorrhagic nodules in which only invasive, giant trophoblastic cells developed. These cells shared many morphological features with the trophoblastic cells involved in normal implantation. At the periphery of the nodules, trophoblastic giant cells were frequently seen growing toward the host connective tissue. The association between the trophoblast and fibrilar components of the extracellular matrix was examined. No direct association with collagen fibrils was noted; however, many areas of the surface of invasive cells were in close proximity with microfibrils of the extracellular matrix. Since only the invasive trophoblast cells exhibited such an association, a direct comparison was made with the process of trophoblast migration within the connective tissue.

L12 ANSWER 61 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1993:635438 SCISEARCH Full-text
THE GENUINE ARTICLE: MB892
TITLE: RESTRICTED EXPRESSION OF THE HYALURONAN RECEPTOR, CD44, DURING POSTIMPLANTATION MOUSE EMBRYOGENESIS SUGGESTS KEY ROLES IN TISSUE FORMATION AND PATTERNING
AUTHOR: WHEATLEY S C (Reprint)
CORPORATE SOURCE: UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, DEPT BIOL, PRINCE CONSORT RD, LONDON SW7 2BB, ENGLAND (Reprint)
AUTHOR: ISACKE C M; CROSSLEY P H
CORPORATE SOURCE: UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, DEPT BIOCHEM, LONDON SW7 2BB, ENGLAND
COUNTRY OF AUTHOR: ENGLAND
SOURCE: DEVELOPMENT, (OCT 1993) Vol. 119, No. 2, pp.

295-306.
ISSN: 0950-1991.
PUBLISHER: COMPANY OF BIOLOGISTS LTD, BIDDER BUILDING CAMBRIDGE COMMERCIAL PARK COWLEY RD, CAMBRIDGE, CAMBS, ENGLAND CB4 4DL.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 81
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB CD44 is a multifunctional adhesion protein that acts as a major receptor for the hygroscopic extracellular matrix component, hyaluronan. This receptor-ligand binding directly mediates at least some of the cell-cell and cell-matrix interactions ascribed to CD44. Other interactions involving CD44 may be modulated indirectly by its ability to bind growth factors and thereby to promote cell attachment. During vertebrate development, multiple cases of hyaluronan involvement in cell proliferation, cell migration and histogenesis have been documented. In addition, there is evidence suggesting a central role for cell surface glycoproteins and proteoglycans in mediating the action of polypeptide growth factors involved in tissue patterning. In view of this, we undertook to investigate expression of the CD44 protein during postimplantation mouse embryogenesis. Between 9.5 and 12.5 days of embryonic development, the predominant form of CD44 protein corresponds to the hyaluronan -binding CD44H form. However, species with a higher M(r) were also detected, implying that CD44 isoforms generated by alternative splicing of CD44 RNA are employed in normal development. Further, we used mouse embryos to perform whole-mount immunohistochemistry and examine the temporal and spatial distribution of this glycoprotein. CD44 is expressed at high levels in the heart, somites and condensing limb-bud mesenchyme at critical stages of morphogenesis. These sites correlate with regions where hyaluronan has been demonstrated to regulate morphogenetic events. Of novel interest, however, is the high expression of CD44 in regions that do not correlate with sites of known hyaluronan-mediated developmental events. These include instructive epithelia participating in epithelial-mesenchymal cell interactions such as the apical ectodermal ridge of the developing limb bud and the odontogenic placodes of the presumptive upper and lower jaws.

L12 ANSWER 62 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:300572 SCISEARCH Full-text
THE GENUINE article: LA840
TITLE: SYNTHETIC-POLYMER MATRICES FOR NEURAL CELL TRANSPLANTATION
AUTHOR: WOERLY S (Reprint); ULBRICH K; CHYTRY V; SMETANA K; PETROVICKY P; RIHOVA B; MORASSUTTI D J
CORPORATE SOURCE: CZECHOSLOVAK ACAD SCI, INST MACROMOLEC CHEM, PRAGUE 6, CZECHOSLOVAKIA; CZECHOSLOVAK ACAD SCI, INST MICROBIOL, PRAGUE 6, CZECHOSLOVAKIA; CHARLES UNIV, FAC MED 1, DEPT ANAT, PRAGUE 2, CZECHOSLOVAKIA; UNIV OTTAWA, DEPT BIOL, OTTAWA K1N 6N5, ONTARIO, CANADA; UNIV OTTAWA, DEPT NEUROSURG, OTTAWA K1N 6N5, ONTARIO, CANADA
COUNTRY OF AUTHOR: CZECHOSLOVAKIA; CANADA
SOURCE: CELL TRANSPLANTATION, (MAY-JUN 1993) Vol. 2, No.

3, pp. 229-239.
ISSN: 0963-6897.
PUBLISHER: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD, ENGLAND OX5 1GB.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 37
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB This study proposes a strategy to promote the integration of a neural graft into the host brain tissue. It involves the attachment of donor cells to a polymeric matrix, and the implantation of this cell-polymer matrix. We have synthesized hydrogels based on N-(2-hydroxypropyl)-methacrylamide (HPMA) to produce highly porous matrices. As preliminary steps, we have examined: 1) The response of the brain tissue to the implantation of PHPMA/collagen hydrogels; 2) adhesion, growth, differentiation, and viability of embryonic neuronal cells, and embryonal carcinoma-derived neurons seeded onto PHPMA substrates containing hexosamine residues (glucosamine and N-acetylglucosamine), and after entrapment of cells within the hydrogels. Histological analysis seven wk after implantation showed the tolerance of PHPMA hydrogels, and the penetration of host cells into the pore structures. However, cellular ingrowth requires the presence of collagen, and is dependent upon porosity. In vitro data showed that PHPMA substrates supported neuronal cell attachment and neuritic growth, but the biocompatibility of the substrate was enhanced after incorporation of N-acetylglucosamine into the hydrogel. The data also showed the feasibility of entrapping cells into the polymer matrices, and that these ''cellular'' hydrogel matrices could be maintained in vitro with preservation of cell viability and differentiation. These findings suggest that PHPMA-based hydrogels can serve as carriers for neural transplant, and as a support to guide tissue ingrowth and organization.

L12 ANSWER 63 OF 177 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:91427 SCISEARCH Full-text
THE GENUINE ARTICLE: KK691
TITLE: CELLULAR FIBRONECTIN AND TENASCIN IN AN ORBITAL NYLON PROSTHESIS REMOVED BECAUSE OF INFECTION CAUSED BY STAPHYLOCOCCUS-AUREUS

AUTHOR: PAALLYSAHO T (Reprint)
CORPORATE SOURCE: UNIV HELSINKI, DEPT ANAT, SILTAVUORENPENGER 20A, SF-00170 HELSINKI 17, FINLAND (Reprint)
AUTHOR: TERVO K; KIVELA T; VIRTANEN I; TARKKANEN A; TERVO T
CORPORATE SOURCE: UNIV HELSINKI, DEPT OPHTHALMOL, SF-00290 HELSINKI 29, FINLAND
COUNTRY OF AUTHOR: FINLAND
SOURCE: GRAEFES ARCHIVE FOR CLINICAL AND EXPERIMENTAL OPHTHALMOLOGY, (FEB 1993) Vol. 231, No. 2, pp. 61-65.
ISSN: 0721-832X.
PUBLISHER: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: CLIN
LANGUAGE: English

REFERENCE COUNT: 46
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB An orbital nylon prosthesis was removed because of an infection caused by Staphylococcus aureus that was resistant to antimicrobials. It was processed for histopathology and immunohistochemistry. Within 3 weeks the implant had an extensive ingrowth of fibro-vascular tissue containing chronic inflammatory cells, foreign body giant cells, and myofibroblasts. By using the indirect immunofluorescent method, this tissue was found to react with monoclonal antibodies (Mabs) against extradomain A of cellular fibronectin (EDA-cFN) and tenascin (TN). The presence of EDA-cFN and TN within the implant are indicative of an active healing process, since both of these proteins, scarce in adult tissues, have been shown to be reexpressed during tissue regeneration. The findings suggest that fibronectin plays a definite role in bacterial adherence and foreign body infections.

L12 ANSWER 64 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2009-S06252 [200980] WPIX
CROSS REFERENCE: 2002-557884; 2002-583707; 2002-590895; 2002-740916; 2004-034746; 2004-068919; 2004-216088; 2006-560016; 2006-569314; 2006-586455; 2006-621122; 2007-536368; 2008-G83565; 2009-H81611
TITLE: Surgical method for treating pelvic floor disorder of patient such as urinary incontinence, pelvic organ prolapse, rectocele involves attaching different implant material to attachment end of synthetic material
DERWENT CLASS: A96; D22; P32
INVENTOR: ANDERSON K A; BACHMAN T A; BOUCHIER M S; GOHMAN J A; LUND R E; STURZL F D; NEISZ J J; WATSCHKE B P
PATENT ASSIGNEE: (AMSR-N) AMS RES CORP
COUNTRY COUNT: 3

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 20070225546	A1	20070927	(200980)*	EN	28[23]		
JP 2010046514	A	20100304	(201017)	JA	27		<--
CA 2689942	A1	20021010	(201020)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20070225546	A1 Provisional	US 2001-263472P	20010123
US 20070225546	A1 Provisional	US 2001-269829P	20010220
US 20070225546	A1 Provisional	US 2001-279794P	20010329
US 20070225546	A1 Provisional	US 2001-281350P	20010404
US 20070225546	A1 Provisional	US 2001-295068P	20010601
US 20070225546	A1 Provisional	US 2001-302929P	20010703
US 20070225546	A1 Provisional	US 2001-306915P	20010720
US 20070225546	A1 Provisional	US 2001-307836P	20010725
US 20070225546	A1 Cont of	US 2001-917445	20010727
US 20070225546	A1 Cont of	US 2001-5837	20011109

US 20070225546 A1	CIP of	US 2002-106086	20020325
US 20070225546 A1	Provisional	US 2002-405139P	20020822
US 20070225546 A1	CIP of	US 2002-280945	20021025
US 20070225546 A1	CIP of	US 2002-306179	20021127
US 20070225546 A1	Cont of	US 2002-335119	20021231
US 20070225546 A1		US 2007-755422	20070530
JP 2010046514 A	Div Ex	JP 2004-530878	20030804
JP 2010046514 A		JP 2009-248186	20091028
CA 2689942 A1	Div Ex	CA 2002-2441982	20020328
CA 2689942 A1		CA 2002-2689942	20020328

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
US 20070225546	A1	Cont of	US 6802807	B
US 20070225546	A1	CIP of	US 7048682	B
US 20070225546	A1	CIP of	US 7070556	B
US 20070225546	A1	Cont of	US 7229453	B

PRIORITY APPLN. INFO: US 2007-755422 20070530
US 2002-335119 20021231
US 2002-306179 20021127
US 2002-280945 20021025
US 2002-405139P 20020822
US 2002-106086 20020325
US 2001-5837 20011109
US 2001-917445 20010727
US 2001-307836P 20010725
US 2001-306915P 20010720
US 2001-302929P 20010703
US 2001-295068P 20010601
US 2001-281350P 20010404
US 2001-279794P 20010329
US 2001-269829P 20010220
US 2001-263472P 20010123
US 2001-322309P 20010914

AN 2009-S06252 [200980] WPIX

CR 2002-557884; 2002-583707; 2002-590895; 2002-740916; 2004-034746; 2004-068919; 2004-216088; 2006-560016; 2006-569314; 2006-586455; 2006-621122; 2007-536368; 2008-G83565; 2009-H81611

AB US 20070225546 A1 UPAB: 20091214

NOVELTY - A synthetic material (42) is used for forming a portion of an implant. The portion of the implant has a distal end and an attachment end (15). The synthetic material is held by an implant assembly tool while attaching different implant material at the attachment end of the synthetic material comprised of polypropylene mesh material on which a biomaterial is sutured.

USE - For treating pelvic floor disorder of patient such as urinary incontinence, pelvic organ prolapse, rectocele, cystocele.

ADVANTAGE - Implants sling in the retropubic space without abdominal incisions e.g. with the use of a bone anchor or alternatively, with a hemi-sling. Provides improved surgical procedures that utilize the surgical articles. The sling not only avoids infections or tissue (urethral) erosion (actual or perceived), but determines the shelf life of the material, the type of material, the shape of the material, the presence of a sling tensioning member, the present of a sling adjustment feature, sling material treatment, the porosity of the sling material, the shape of the sling material, the sling length, the strength of the material, the elastic property of the material,

the potential for tissue ingrowth, the biocompatibility of the material, and the presence or absence of the sheath. Enables to treat the pelvic floor disorder of patient such as urinary incontinence, pelvic organ prolapse, rectocele, cystocele. DESCRIPTION OF DRAWINGS - The figure is the schematic view of the implant assembly tool and synthetic implant material in open position.
Attachment end (15)
Synthetic material (42)
Legs (43,45)
Sheath (44)

L12 ANSWER 65 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2008-L10470 [200865] WPIX
CROSS REFERENCE: 2004-031183; 2004-363891; 2004-374216; 2004-429770; 2009-E03283; 2001-579736; 2002-017136; 2002-698310; 2003-585414; 2003-586374; 2003-876599; 2005-725192; 2009-F01476; 2010-B44050
TITLE: Cleaning and disinfecting a cartilage graft by inducing a negative or positive pressure mediated flow of a cleaning solution through a processing chamber and soaking the cartilage graft with the cleaning solution
DERWENT CLASS: A96; B04; D16; D22; P32
INVENTOR: CHEN J; CHEN S S; QIN X; WOLFINBARGER L
PATENT ASSIGNEE: (CHEN-I) CHEN J; (CHEN-I) CHEN S S; (QINX-I) QIN X; (WOLF-I) WOLFINBARGER L
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20080077251	A1	20080327	(200865)*	EN	90	[41]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20080077251	A1 CIP of	US 1999-327240	19990607
US 20080077251	A1 CIP of	US 2000-528371	20000317
US 20080077251	A1 CIP of	US 2000-660422	20000912
US 20080077251	A1 CIP of	US 2003-624534	20030723
US 20080077251	A1 CIP of	US 2003-694190	20031028
US 20080077251	A1	US 2007-826522	20070716

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
US 20080077251	A1	CIP of	US 6734018	B
US 20080077251	A1	CIP of	US 6743574	B

PRIORITY APPLN. INFO: US 2007-826522 20070716
US 1999-327240 19990607
US 2000-528371 20000317
US 2000-660422 20000912
US 2003-624534 20030723
US 2003-694190 20031028
AN 2008-L10470 [200865] WPIX

CR 2004-031183; 2004-363891; 2004-374216; 2004-429770; 2009-E03283; 2001-579736; 2002-017136; 2002-698310; 2003-585414; 2003-586374; 2003-876599; 2005-725192; 2009-F01476; 2010-B44050

AB US 20080077251 A1 UPAB: 20090205

NOVELTY - Cleaning and disinfecting a cartilage graft comprises: (1) inducing a negative or positive pressure mediated flow of a cleaning solution through a processing chamber, where the cartilage graft resides to produce a cleaned cartilage matrix; and (2) soaking the cartilage graft in the processing chamber with the cleaning solution. The inducing and the soaking are carried out sequentially or simultaneously for a time effective to produce a cleaned intact cartilage graft essentially free from bone marrow. The soaking is optionally conducted under sonication.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are: (1) a process for repairing a cartilage defect and implanting a cartilage graft into a human or animal; (2) a process for preparing a devitalized cartilage graft;

(3) a process for repairing a cartilage defect and implanting a cartilage graft into a human or animal; and (4) a cleaned, disinfected or devitalized cartilage graft. ACTIVITY - Osteopathic. No biological data given.

MECHANISM OF ACTION - Cell-Therapy.

USE - The method is useful for cleaning and disinfecting a cartilage graft, for preparing a devitalized cartilage graft or for repairing a cartilage defect and implanting a cartilage graft into a human or animal (claimed).

ADVANTAGE - The devitalized cartilage graft is essentially free from metabolically viable and/or reproductively viable cells and the rinsing solution is hypotonic solution or isotonic solution. The cartilage part of the graft may be treated to improve recellularization by chemical or physical modification. The cartilage may further be recellularized from devitalized cartilage matrix. Moreover, the cartilage graft may be implanted into a recipient and sealed with recipient tissue.

DESCRIPTION OF DRAWINGS - The figure shows a schematic view of articular cartilage grafts of osteochondral plugs. Osteochondral plug (5)

Cartilage cap (6)

Subchondral bone portion. (7)

L12 ANSWER 66 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 2008-H46301 [200847] WPIX

CROSS REFERENCE: 2004-448907

DOC. NO. NON-CPI: N2008-595967 [200847]

TITLE: Bone's angular deformity correcting method for e.g. human, involves advancing bone engagers via openings into metaphyseal and epiphyseal sections, respectively so that link spans across physis and restricts growth of tissue

DERWENT CLASS: P31; P32

INVENTOR: JUSTIN D F; STEVENS P M

PATENT ASSIGNEE: (STEV-I) STEVENS P M

COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20080161816	A1	20080703	(200847)*	EN	31	[23]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 20080161816 A1 Div Ex US 2002-310720 20021204
US 20080161816 A1 US 2008-51152 20080319

PRIORITY APPLN. INFO: US 2008-51152 20080319
US 2002-310720 20021204
AN 2008-H46301 [200847] WPIX
CR 2004-448907
AB US 20080161816 A1 UPAB: 20080724
NOVELTY - The method involves inserting a guide wire (8) within a physis (1) of a bone having an angular deformity (4), where the physis separates a metaphyseal section (2) of the bone from an epiphyseal section (3) of the bone. The guide wire is utilized to guide a link (30) to the physis, and the link is comprised of two openings . Two bone engagers are advanced through the openings into the metaphyseal and epiphyseal sections, respectively so that the link spans across the physis and restricts growth of physeal tissue of the physis adjacent to the link.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for mounting a bone alignment implant.
USE - Method for correcting an angular deformity in a bone of a patient e.g. human.
ADVANTAGE - The two bone engagers are advanced through the openings into the metaphyseal and epiphyseal sections, respectively so that the link spans across the physis and restricts growth of physeal tissue of the physis adjacent to the link, thus realigning angular and rotational deformities in long bones in patients with active growth plates, while minimizing chance of damaging the physis throughout bone realignment. DESCRIPTION OF DRAWINGS - The drawing shows an anterior view of a knee depicting a genu valgum deformity in femur and insertion of a guide wire approximately parallel to a physis. Physis (1)
Metaphyseal section (2)
Epiphyseal section (3)
Angular deformity (4)
Guide wire (8)
Link (30)

L12 ANSWER 67 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2008-G65298 [200842] WPIX
CROSS REFERENCE: 2005-020606
DOC. NO. CPI: C2008-210570 [200842]
DOC. NO. NON-CPI: N2008-524361 [200842]
TITLE: Implantable intraluminal medical device for drug delivery structure formed from polymer(s), and therapeutic agent(s) dispersed throughout the polymer(s)
DERWENT CLASS: A96; B07; D22; P32; P34
INVENTOR: CHEN C C; DAVE V
PATENT ASSIGNEE: (CHEN-I) CHEN C C; (DAVE-I) DAVE V
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20080051866	A1 20080228	(200842)*	EN	46[10]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 20080051866 A1 CIP of US 2003-374211 20030226
US 20080051866 A1 CIP of US 2004-834687 20040429
US 20080051866 A1 US 2006-435195 20060516

PRIORITY APPLN. INFO: US 2006-435195 20060516
US 2003-374211 20030226
US 2004-834687 20040429

AN 2008-G65298 [200842] WPIX
CR 2005-020606
AB US 20080051866 A1 UPAB: 20080703
NOVELTY - An implantable intraluminal medical device comprises a structure formed from polymer(s); and therapeutic agent(s) dispersed throughout the polymer(s) in a concentration of 30%.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (1) a method for forming an implantable medical device comprising creating a matrix from at least one biocompatible polymer; dispersing therapeutic agent(s) in the matrix to create a raw material, the therapeutic agent having a degradation temperature; heating the raw material to a maximum solvent processing at 1-80 degrees C less than the degradation temperature of the therapeutic agent(s); and forming the heated raw material to an implantable medical device; and (2) a method of deploying an intraluminal device.
USE - Implantable intraluminal medical device for drug delivery used for treating coronary and peripheral diseases, such as vulnerable plaque, restenosis, bifurcated lesions, superficial femoral artery, below the knee, saphenous vein graft, arterial tree, small and tortuous vessels, and diffused lesions.
ADVANTAGE - The drug delivery device retains its mechanical integrity during the active drug delivery phase of the device. After drug delivery is achieved, the structure of the device ideally disappears as a result of the bioabsorption of the materials comprising the device. DESCRIPTION OF DRAWINGS - The drawing shows a perspective view of the stent in a closed-configuration.
Stent (200)
Front/back ends (202, 204)
Adjacent loops (206a-206h)
Loops (210)

L12 ANSWER 68 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2008-D25264 [200824] WPIX
CROSS REFERENCE: 2004-499839; 2006-007723; 2007-701310; 2008-G24949
DOC. NO. CPI: C2008-104560 [200824]
DOC. NO. NON-CPI: N2008-254846 [200824]
TITLE: Composite osteoimplant, useful e.g. to treat bony defects, fractures, bone cancer, rheumatoid arthritis, osteoarthritis and bone metastases, comprises bone-derived particles and a polymer
DERWENT CLASS: A96; B04; D22; P32
INVENTOR: BHATTACHARYYA S; BOYCE T M; KAES D R; KNAACK D; RUSSELL J; TUNC D C; WINTERBOTTOM J
PATENT ASSIGNEE: (BHAT-I) BHATTACHARYYA S; (BOYC-I) BOYCE T M; (KAES-I) KAES D R; (KNAA-I) KNAACK D; (RUSS-I) RUSSELL J; (TUNC-I) TUNC D C; (WINT-I) WINTERBOTTOM J
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20070191963	A1 20070816	(200824)*	EN	28[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20070191963	A1 Provisional	US 2002-432968P	20021212
US 20070191963	A1 CIP of	US 2003-735135	20031212
US 20070191963	A1 Provisional	US 2004-568472P	20040504
US 20070191963	A1 CIP of	US 2005-47992	20050131
US 20070191963	A1 Provisional	US 2006-760239P	20060119
US 20070191963	A1 Provisional	US 2006-760538P	20060119
US 20070191963	A1 Provisional	US 2006-760752P	20060119
US 20070191963	A1 Provisional	US 2006-760753P	20060119
US 20070191963	A1	US 2007-625119	20070119

PRIORITY APPLN. INFO: US 2007-625119 20070119
US 2002-432968P 20021212
US 2003-735135 20031212
US 2004-568472P 20040504
US 2005-47992 20050131
US 2006-760239P 20060119
US 2006-760538P 20060119
US 2006-760752P 20060119
US 2006-760753P 20060119

AN 2008-D25264 [200824] WPIX

CR 2004-499839; 2006-007723; 2007-701310; 2008-G24949

AB US 20070191963 A1 UPAB: 20080918

NOVELTY - Composite osteoimplant (I) comprises many of bone-derived particles; and a polymer with which the particles have been combined, where (I) has an initial phase and a set phase and the set phase is more resistant to mechanical deformation relative to the initial phase.

ACTIVITY - Osteopathic; Cytostatic; Antiinflammatory; Antiarthritic; Antirheumatic; Immunosuppressive; Metabolic; Neuroprotective; Vulnerary.

MECHANISM OF ACTION - None given.

USE - (I) is useful: in orthopedic medicine; to treat bony defects in a subject (human, reptiles, fish, birds or domesticated animal (such as dog, cat or horse)); to repair a fracture, simple fracture, compound fracture, or nonunion in a subject's bone; to treat genetic diseases, congenital abnormalities, iatrogenic defects, bone cancer, bone metastases, inflammatory diseases (e.g. rheumatoid arthritis), autoimmune diseases, metabolic diseases, and degenerative bone disease (e.g., osteoarthritis); as an external fixation device or internal fixation device; for joint reconstruction, arthrodesis, arthroplasty, or cup arthroplasty of the hip; for femoral or humeral head replacement; for femoral head surface replacement or total joint replacement; for repair of the vertebral column, spinal fusion or internal vertebral fixation; for tumor surgery; for deficit filling; for discectomy; for laminectomy; for excision of spinal tumors; for an anterior cervical or thoracic operation; for the repairs of a spinal injury; for scoliosis, for lordosis or kyphosis treatment; for intermaxillary fixation of a fracture; for mentoplasty; for temporomandibular joint replacement; for alveolar ridge augmentation and reconstruction; as an inlay osteoimplant; for implant placement and revision; for sinus lift; for a cosmetic procedure ; for revision surgery; for revision surgery of a total joint arthroplasty; and for the repair or replacement of the ethmoid, frontal, nasal, occipital, parietal, temporal, mandible, maxilla, zygomatic, cervical vertebra, thoracic vertebra, lumbar vertebra, sacrum, rib, sternum, clavicle, scapula, humerus, radius, ulna, carpal bones, metacarpal bones, phalanges, ilium, ischium, pubis, femur, tibia, fibula, patella, calcaneus, tarsal bones, or metatarsal bones; and to seal a defect, void, or hole in a bone, e.g. a bony defect may be filled with

mineralized and/or partially or fully demineralized allograft bone or other bone substitute material.
ADVANTAGE - (I) is moldable. (I) can be shaped manually, using a surgical instrument or using a machine (all claimed). (I) is flowable. (I) is able to fill irregularly shape implantation site and is settable to provide the mechanical strength required for most orthopedic applications. (I) reduces the need for metal pins, screws or meshes. (I) exhibits high degrees of porosity over a wide range of effective pore sizes. (I) provides more extensive cellular and tissue in-growth into the composite, more continuous supply of nutrients, more thorough infiltration of therapeutics, enhanced revascularization, and efficient bone growth and repair of bony defects.

L12 ANSWER 69 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2007-571015 [200755] WPIX
CROSS REFERENCE: 1996-097626; 1999-508171; 2002-171698; 2003-553676; 2004-118877
TITLE: New isolated connective tissue growth factor 2 (CTGF-2) polynucleotide and polypeptide, useful for treating skin disorders such as injuries, acne, aging, UV damage, or burns
DERWENT CLASS: B04; D16; D21; D22
INVENTOR: ADAMS M D; LI H
PATENT ASSIGNEE: (HGSI-C) HUMAN GENOME SCI INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20070154908	A1	20070705	(200755)*	EN	19	[1]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20070154908	A1 CIP of	WO 1994-US7736	19940712
US 20070154908	A1 Div Ex	US 1995-459101	19950602
US 20070154908	A1 Div Ex	US 1999-348815	19990708
US 20070154908	A1 Cont of	US 2002-294796	20021115
US 20070154908	A1	US 2006-563870	20061128

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
US 20070154908	A1	Div ex	US 5945300	A
US 20070154908	A1	Div ex	US 6534630	B

PRIORITY APPLN. INFO: US 2006-563870 20061128
WO 1994-US7736 19940712
US 1995-459101 19950602
US 1999-348815 19990708
US 2002-294796 20021115
AN 2007-571015 [200755] WPIX
CR 1996-097626; 1999-508171; 2002-171698; 2003-553676; 2004-118877
AB US 20070154908 A1 UPAB: 20070827
NOVELTY - An isolated polynucleotide selected from: (a) a polynucleotide encoding a polypeptide comprising a 381 amino acid sequence (SEQ ID NO: 2),

given in the specification; (b) a polynucleotide encoding the polypeptide comprising amino acids 25-381 of SEQ ID NO: 2; (c) a polynucleotide encoding the polypeptide comprising amino acids 1-351 of SEQ ID NO: 2; (d) a polynucleotide capable of hybridizing to and is at least 70% identical to the polynucleotide of (a) or (b); or (e) a polynucleotide fragment of the polynucleotide of (a), (b), (c), or (d), is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are: (1) a vector containing the DNA; (2) a host cell genetically engineered with the vector; (3) a process for producing the polypeptide; (4) a process for producing cells capable of expressing the polypeptide;
(5) a polypeptide selected from: (a) a mature polypeptide having the deduced amino acid sequence of SEQ ID NO. 2 and fragments, analogs, and derivatives; or (b) a mature polypeptide encoded by the cDNA of ATCC Deposit Number 75804 and fragments, analogs, and derivatives of the polypeptide;
(6) an antibody that binds to the polypeptide; (7) a method of producing an antibody that binds the polypeptide purified from a cell;
(8) a compound, which inhibits activation of the receptor for the polypeptide or which activates the receptor for the polypeptide; (9) a method for the treatment of a patient having need of CTGF-2; (10) a method for the treatment of a patient having need to inhibit a CTGF-2 polypeptide;
(11) a process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide;
(12) a diagnostic process comprising analyzing for the presence of the polypeptide in a sample derived from a host; and (13) a method for identifying agonist or antagonist compounds to the polypeptide.
ACTIVITY - Vulnerary; Antiseborrheic; Dermatological; Nootropic. No biological data given.
MECHANISM OF ACTION - CTGF-2-Agonist; CTGF-2-Antagonist.
USE - The polynucleotide, polypeptide, composition, and methods are useful for diagnosing or treating a patient having need of CTGF-2. CTGF-2 may be used to treat skin disorders such as injuries, acne, aging, UV damage, or burns. It can also be used to improve the cosmetic appearance of the skin, for example, by treating wrinkled skin. The CTGF-2 can also be used to promote the attachment, fixation, and stabilization of tissue implants, e.g. a prosthesis and other implants inserted during reconstructive surgery. It can be used in the healing of external wounds, by promoting growth of epithelial and connective tissues. CTGF-2 may be applied in the area of injured or depleted bones, with regeneration occurring by promoting the growth of connective tissue , bone, and cementum and by stimulating protein and collagen synthesis, which is especially useful for periodontal disease.

L12 ANSWER 70 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2007-469099 [200746] WPIX
TITLE: New isolated transforming growth factor beta-related (TGF-beta-R) nucleic acids and polypeptides, useful for treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, e.g. gastric or duodenal ulcers
DERWENT CLASS: A96; B04; D16; S03; T01
INVENTOR: JING S
PATENT ASSIGNEE: (AMGE-C) AMGEN INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
AU 2006203546	A1 20060907	(200746)*	EN	126[6]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
AU 2006203546 A1	Div Ex	AU 2002-219947	20011130
AU 2006203546 A1		AU 2006-203546	20060817

PRIORITY APPLN. INFO: AU 2006-203546 20060817
AU 2002-219947 20011130

AN 2007-469099 [200746] WPIX

AB AU 2006203546 A1 UPAB: 20070719

NOVELTY - An isolated nucleic acid molecule comprising (a) a nucleotide sequence comprising fully defined 665 or 810 bp sequences (SEQ ID NO. 1 or 3); (b) a nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666; or (c) a nucleotide sequence encoding a polypeptide comprising fully defined 140 or 195 amino acid sequences (SEQ ID NO. 2 or 4), is new.

DETAILED DESCRIPTION - An isolated nucleic acid molecule comprising a nucleotide sequence selected from: (a) the nucleotide sequence comprising SEQ ID NO. 1 or 3; (b) the nucleotide sequence of the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666; (c) a nucleotide sequence encoding the polypeptide comprising SEQ ID NO. 2 or 4; (d) a nucleotide sequence that hybridizes under at least moderately stringent conditions to the complement of the nucleotide sequence of any of (a) - (c); or (e) a nucleotide sequence complementary to the nucleotide sequence of any of (a)-(c), is new. INDEPENDENT CLAIMS are also included for: (1) a vector comprising the nucleic acid molecule; (2) a host cell comprising the vector; (3) a process of producing a TGF-beta-R polypeptide; (4) a polypeptide produced by the process above; (5) a process for determining whether a compound inhibits TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production; (6) an isolated polypeptide comprising an amino acid sequence selected from: (a) the amino acid sequence of SEQ ID NO. 2 or 4; or (b) the amino acid sequence encoded by the DNA insert in ATCC Deposit Nos. PTA-2665 or PTA-2666;

(7) a selective binding agent or its fragment that specifically binds the polypeptide;

(8) a selective binding agent or its fragment comprising at least one complementarity determining region with specificity for a polypeptide having the amino acid sequence of SEQ ID NO. 2 or 4; (9) a method for treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, condition, or disorder; (10) a selective binding agent produced by immunizing an animal with a polypeptide comprising SEQ ID NO. 2 or 4; (11) a hybridoma that produces a selective binding agent capable of binding the polypeptide;

(12) a method of detecting or quantitating the amount of TGF-beta-R polypeptide using the anti-TGF-beta-R antibody or its fragment; (13) a kit for detecting or quantitating the amount of TGF-beta-R polypeptide in a biological sample comprising the selective binding agent; (14) a polypeptide comprising a derivative of the polypeptide above;

(15) a viral vector comprising the nucleic acid molecule; (16) a fusion polypeptide comprising the polypeptide fused to a heterologous amino acid sequence;

(17) a method of diagnosing a pathological condition or a susceptibility to a pathological condition m a subject; (18) a device comprising: (a) a membrane for implantation; and (b) cells encapsulated within the membrane, where the cells secrete the protein; and the membrane is permeable to the protein and impermeable to materials detrimental to the cells; (19) a method of identifying a compound that binds to a TGF-beta-R polypeptide;

(20) a method of modulating levels of a polypeptide in an animal comprising administering to the animal the nucleic acid molecule; (21) a transgenic non-human mammal comprising the nucleic acid molecule;

(22) a process for determining whether a compound inhibits TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production comprising exposing a transgenic mammal to the compound, and measuring TGF-beta-R polypeptide activity or TGF-beta-R polypeptide production in the mammal; and (23) an array of nucleic acid molecules comprising at least one nucleic acid molecule.
ACTIVITY - Osteopathic; Immunosuppressive; Antiulcer; Gastrointestinal-Gen; Vulnerary; Cytostatic; Antiinfertility. No biological data given.
MECHANISM OF ACTION - TGF-Antagonist-Beta; Gene Therapy.
USE - The nucleic acid, polypeptide, and methods are useful for treating, preventing, or ameliorating a TGF-beta-R polypeptide-related disease, condition, or disorder. It can be used for preventing or treating degenerative disorders of the cartilage, bone, teeth, or other tissues (such as the kidney or liver); prevent organ rejection in transplantation (as an immune system suppressor); treat gastric or duodenal ulcers; promote wound healing; treat burns; promote tissue repair; suppress tumor growth (by inhibiting certain anchorage-dependent cells); or treat impaired fertility.

L12 ANSWER 71 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2006-171103 [200618] WPIX
CROSS REFERENCE: 2002-268901; 2003-554818
DOC. NO. CPI: C2006-057396 [200618]
DOC. NO. NON-CPI: N2006-147586 [200618]
TITLE: Osteoimplant, useful for repairing and/or treating bone defect, comprises a coherent aggregate of elongate bone particles, where the implant possess predetermined dimensions and shape
DERWENT CLASS: A96; B05; D16; D22; P32
INVENTOR: BODEN S D; EDWARDS J T; MANRIQUE A; RUSSELL J L; SCARBOROUGH N L; SHIMP L A; TRAIANEDES K
PATENT ASSIGNEE: (BODE-I) BODEN S D; (EDWA-I) EDWARDS J T; (MANR-I) MANRIQUE A; (RUSS-I) RUSSELL J L; (SCAR-I) SCARBOROUGH N L; (SHIM-I) SHIMP L A; (TRAI-I) TRAIANEDES K
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20060030948	A1 20060209	(200618)*	EN	19[5]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20060030948	A1 Provisional	US 2000-219198P	20000719
US 20060030948	A1 Provisional	US 2001-288212P	20010502
US 20060030948	A1 CIP of	WO 2001-US22853	20010719
US 20060030948	A1 Div Ex	US 2002-137862	20020502
US 20060030948	A1	US 2005-231954	20050921

PRIORITY APPLN. INFO: US 2005-231954 20050921
US 2000-219198P 20000719
US 2001-288212P 20010502
WO 2001-US22853 20010719
US 2002-137862 20020502
AN 2006-171103 [200618] WPIX
CR 2002-268901; 2003-554818

AB US 20060030948 A1 UPAB: 20060315
NOVELTY - Osteoimplant (I) comprises a coherent aggregate of elongate bone particles, where (I) possess predetermined dimensions and shape.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an implant (II) for bone repair possessing at least one cavity containing (I); (2) a method of making an osteoimplant comprising providing a quantity of elongate bone particles; mixing the elongate bone particles with an aqueous wetting agent to provide a fluid composition containing 5-40 volume percent swollen, hydrated elongate bone particles; introducing the fluid composition into a mold; and removing aqueous wetting agent to provide a coherent aggregate of elongate bone particles possessing the dimensions and shape of the osteoimplant; (3) a method of making a plug for insertion in a cavity of an implant or bone defect site, comprising: providing a coherent aggregate of elongate bone particles; lyophilizing the coherent aggregate of elongate bone particles or subjecting the coherent aggregate of elongate bone particles to a compressive force; and forming the (compressed) coherent aggregate of elongate bone particles into the plug before or after carrying out the lyophilizing step; or providing a coherent aggregate of elongate bone particles at least some of which possess surface-exposed collagen; crosslinking elongate bone particles in the coherent aggregate through their mutually-contacting surface exposed collagen; and shaping the cross linked coherent aggregate of elongate bone particles into the plug before or after carrying out crosslinking step; (4) a method of treating a bone defect in which the bone defect site possesses at least one cavity, comprising: providing a coherent aggregate of elongate bone particles; subjecting the coherent aggregate of elongate bone particles to a compressive force; and forming the compressed coherent aggregate of elongate bone particles into the plug before or after carrying out the subjecting step; or inserting a plug in the cavity, the plug comprising a coherent aggregate of elongate bone particles sized and shaped to substantially fill the cavity; (5) a method of fusing adjacent vertebrae comprising providing a space between adjacent vertebrae to be fused; and implanting (I) in the space; and
(6) a method of repairing and/or treating bone comprising implanting (I) at a bone repair site. ACTIVITY - Osteopathic.
MECHANISM OF ACTION - None given.
USE - (I) is useful for repairing and/or treating bone defect, where the repaired bone is ethmoid, frontal, nasal, occipital, parietal, temporal, mandible, maxilla, zygomatic, cervical vertebra, thoracic vertebra, lumar vertebra, scarum, rib, sternum, clavicle, scapula, humerus, radius, ulna, carpal bones, metacarpal bones phalanges, ilium, ischium, pubis, femur, tibia, fibula, patella, calcaneus, tarsal or metatarsal bones (claimed). (I) (can be fashioned as a plug for insertion in a space or cavity within an implant) is useful in an orthopedic procedure e.g. intervertebral spacer employed in spinal fusion or for insertion in a cavity associated with a relatively well-defined bone defect e.g. an extraction socket and a bore hole . The osteoinductive potential of (I) for posterolateral fusion was tested using rats. The results showed that (I) provided excellent osteoinductivity with a cohesive three-dimension, lower density and porous matrix.
ADVANTAGE - (I) possess predetermined dimensions and shape (claimed). (I) is highly absorbent and sponge-like in nature. (I) can be readily applied to virtually any bone repair site in the body and can be utilized alone or in combination with one or more adjunct medical devices and/or procedures. (I) has unique ability to absorb body fluids and still retain its original shape. (I) has excellent osteoinductivity.

L12 ANSWER 72 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-809391 [200582] WPIX
CROSS REFERENCE: 2002-146941

DOC. NO. CPI: C2005-248792 [200582]
TITLE: Implantable sleeved organized tissue useful for delivery of proteins e.g. growth hormones comprises sleeve formed of biocompatible structure surrounding tissue in at least one dimension and along length of tissue
DERWENT CLASS: A96; B04; D16; D22
INVENTOR: VALENTINI R F; VANDENBURGH H H
PATENT ASSIGNEE: (CELL-N) CELL BASED DELIVERY
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20050260178	A1 20051124	(200582)*	EN	15[5]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050260178	A1 Cont of	US 1999-342305	19990629
US 20050260178	A1	US 2003-392500	20030320

PRIORITY APPLN. INFO: US 2003-392500 20030320
US 1999-342305 19990629

AN 2005-809391 [200582] WPIX
CR 2002-146941
AB US 20050260178 A1 UPAB: 20060125
NOVELTY - A sleeved organized tissue comprises a sleeve formed of a biocompatible structure surrounding the tissue in at least one dimension and along a length of the tissue. The sleeved organized tissue is implantable into a mammal.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (1) an in vitro method (M1) for producing the sleeved organized tissue involving: providing an organized tissue, and placing the organized tissue into a sleeve; (2) providing (M2) a protein to a mammal, involving: (a1) providing the sleeved organized tissue, where the tissue comprises cells which produce the protein; and
(a2) implanting into the mammal the sleeved organized tissue, where the protein is produced after the implantation;
(3) delivering (M3) a protein to a mammal, involving growing in vitro several mammalian cells, where at least a subset of the cells comprises a foreign DNA sequence operably linked to a promoter and encoding the protein, and the cells are mixed with an extracellular matrix to create a suspension; placing the suspension in a vessel where the cells form an organized tissue having a three dimensional cellular organization which is retained upon implantation into a mammal; inserting the tissue into the sleeve; and implanting the sleeved tissue into the mammal, such that the protein is produced in the mammal. The protein is of a type or produced in an amount not normally produced by the organized tissue. Alternatively the suspension obtained after mixing the cells with an extracellular matrix is placed in the sleeve; and the sleeved tissue is then implanted into the mammal; and
(4) a kit for delivery of a tissue to an organism, comprising the sleeved organized tissue, where the sleeve contains a biocompatible, physiological buffer, and packaging materials.
USE - The apparatus is used for delivery of protein a (e.g. growth factor, growth hormone) (claimed).

ADVANTAGE - The sleeved organized tissue is implantable and retrievable after implantation, and the organized tissue maintains its shape after being removed from the sleeve. The sleeved organized tissue provides protein using minimally invasive technique; and can be guided to body tissues and cavities through vascular or nonvascular routes. The protein produced by the sleeved organized tissue is of a type or produced in an amount not normally produced by organized tissue known in prior art.

L12 ANSWER 73 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-271993 [200528] WPIX
CROSS REFERENCE: 2004-293814; 2004-736013; 2005-110938; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161771; 2005-161772; 2005-403503; 2005-403504; 2008-J47558
DOC. NO. CPI: C2005-085110 [200528]
DOC. NO. NON-CPI: N2005-223409 [200528]
TITLE: Treatment of diagnosed pelvic floor disorders e.g. constipation involves electrical stimulation of the sacral and pudendal nerves in combination with the infusion of a drug to or near target tissue volume in proximity to the nerves
DERWENT CLASS: A96; B05; B07; D22; P34; S05
INVENTOR: GERBER M T
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20050070969	A1	20050331	(200528)*	EN	40	[11]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050070969	A1 CIP of	US 2002-236578	20020906
US 20050070969	A1 CIP of	US 2003-723316	20031126
US 20050070969	A1 CIP of	US 2003-723903	20031126
US 20050070969	A1 CIP of	US 2003-745757	20031223
US 20050070969	A1	US 2004-836355	20040430

PRIORITY APPLN. INFO: US 2004-836355 20040430
US 2002-236578 20020906
US 2003-723316 20031126
US 2003-723903 20031126
US 2003-745757 20031223
AN 2005-271993 [200528] WPIX
CR 2004-293814; 2004-736013; 2005-110938; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161771; 2005-161772; 2005-403503; 2005-403504; 2008-J47558
AB US 20050070969 A1 UPAB: 20051222
NOVELTY - Treatment of at least one diagnosed pelvic floor disorder involves electrical stimulation of the sacral and pudendal nerves or their portions in combination with the infusion of at least one drug to or near at least one target tissue volume in proximity to at least one of the nerves or their portions.

DETAILED DESCRIPTION - Treatment of at least one diagnosed pelvic floor disorder involves providing an hermetically sealed implantable electrical pulse generator configured to provide at least a first electrical stimulation pulse regime via at least a first implantable medical electrical lead, providing the first implantable medical electrical lead, where the first lead is configured for implantation adjacent one of a pudendal nerve or nerve portion and a sacral nerve or nerve portion, and comprises proximal and distal ends and at least a first electrode, providing an hermetically sealed implantable drug pump configured to receive and house a volume of a drug, and to deliver a such drug to an exterior via an implantable drug catheter, providing the drug catheter, which is being configured for implantation adjacent one of the pudendal nerve or nerve portion, and the sacral nerve or nerve portion, and comprises proximal and distal ends, implanting the first lead in or near a first tissue volume of the patient adjacent, around or in one of the pudendal nerve or nerve portion and the sacral nerve or nerve portion, operably connecting the proximal end of the first lead to the implantable pulse generator, implanting the implantable pulse generator within the patient; implanting the implantable drug catheter in or near one the first tissue volume, implanting the implantable drug pump within the patient, operably connecting the proximal end of the implantable drug catheter to the implantable drug pump, delivering, from the implantable pulse generator, first electrical stimulation pulses to or near at least portions of the first tissue volume through the first lead and at least the first electrode, the first pulses is provided in accordance with the first electrical stimulation pulse regime, delivering from the implantable drug pump a predetermined portion of the drug housed to the exterior through the implantable drug catheter and to the distal end to or near at least portions of the first tissue volume, where the combination of the first electrical pulse regime delivered through the first lead to or near at least portions of the first tissue volume, and the delivery of the predetermined amount of the drug to first tissue volume, provides to the patient at least partial relief from the pelvic floor disorder. ACTIVITY - Antitussive; Tranquilizer; Uropathic; Endocrine Gen.; Analgesic; Cytostatic.

MECHANISM OF ACTION - None given.

USE - For the treatment of at least one diagnosed pelvic floor disorder e.g. urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic pain, prostatitis, prostatalgia and prostatodynia (claimed).

ADVANTAGE - The method provides beneficial effects and therapies for various disorders of the pelvic floor over a wider anatomical region than that attained through conventional sacral nerve stimulation. The method avoids or minimizes undesirable side effects of sacral nerve stimulation. The method provides relief from such problems include, but are not limited to, one or sequelae or side-effects resulting from the oral administration of pharmaceutical products, and the requirement to purchase expensive pharmaceutical products on an on-going basis, has the ability to terminate or change instantaneously administration of pharmaceutical therapy and targets with a great deal of precision or specificity the ailment in question using orally delivered pharmaceutical products, is a well-defined or reliable method of determining stimulation electrode placement, provides pain relief therapy for patients having chronic and essentially untreatable pain, and prevents patients from wearing diapers, pads or other devices for containing human waste. Also the method is capable of providing targeting the delivery of therapies with a high degree of specificity, has the ability to change the therapy delivered on-demand or instantaneously, lowers medical care costs in respect of pharmaceutical products, has the potential to deliver superior therapy, does not make a patient to remember to take a drug daily or according to a predetermined regimen, permits stimulation lead implantation surgical

procedures to be completed more quickly, reduces trauma or damage to a patient's pelvic floor anatomy and provides improved physical and electrical coupling of at least one stimulation electrode to a pertinent nerve or its portion.

L12 ANSWER 74 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-161772 [200517] WPIX
CROSS REFERENCE: 2004-293814; 2004-736013; 2005-110938; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161771; 2005-271993; 2005-403503; 2005-403504; 2008-J47558
DOC. NO. CPI: C2005-052305 [200517]
DOC. NO. NON-CPI: N2005-135722 [200517]
TITLE: Treatment of disorders of the pelvic floor (e.g. urinary and fecal voiding dysfunction) comprises delivery of electrical stimuli and drugs to various nerves, nerve portion or tissues
DERWENT CLASS: A96; B07; P34; S05; U22
INVENTOR: GERBER M T
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20050033374	A1	20050210	(200517)*	EN	40	[11]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050033374	A1 CIP of	US 2002-236578	20020906
US 20050033374	A1 CIP of	US 2003-723316	20031126
US 20050033374	A1 CIP of	US 2003-723903	20031126
US 20050033374	A1 CIP of	US 2003-745757	20031223
US 20050033374	A1	US 2004-837181	20040430

PRIORITY APPLN. INFO: US 2004-837181 20040430
US 2002-236578 20020906
US 2003-723316 20031126
US 2003-723903 20031126
US 2003-745757 20031223

AN 2005-161772 [200517] WPIX
CR 2004-293814; 2004-736013; 2005-110938; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161771; 2005-271993; 2005-403503; 2005-403504; 2008-J47558
AB US 20050033374 A1 UPAB: 20060121
NOVELTY - Treatment of pelvic floor disorder comprises implanting a first lead in a first tissue volume; operably connecting the proximal end of lead to a pulse generator; implanting pulse generator, drug catheter and drug pump; operably connecting the proximal end of catheter to pump; delivering first electrical stimulation pulses to portions of first tissue volume; and delivering drug through catheter and to distal end near portions of tissue volume.
DETAILED DESCRIPTION - Treatment of at least one diagnosed pelvic floor disorder (urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention

disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic pain, prostatitis, prostatalgia or prostatodynia) in patients comprises implanting a first lead (comprising proximal and distal ends and at least a first electrode) in or near a first tissue volume of the patient adjacent, around or in hypogastric nerve, prostatic plexus nerve, sacral splanchnic nerve, pelvic splanchnic nerve, prostate, colon, inferior rectal nerves, perineal nerves, scrotal nerves, Alcock's canal, sacro-tuberous ligament, ischial tuberosity, greater sciatic foramen and lesser sciatic foramen or all of their branches or portions; bladder, vagina, anus, external anal sphincter, urethra, penile dorsal nerve and scrotum or their portions; and/or pelvic floor; operably connecting the proximal end of the first lead to an hermetically sealed implantable pulse generator (configured to provide at least a first electrical stimulation pulse regime via at least the first implantable medical electrical lead); implanting the implantable pulse generator within the patient; implanting an implantable drug catheter (configured for implantation adjacent, around or in hypogastric nerve, prostatic plexus nerve, sacral splanchnic nerve, pelvic splanchnic nerve, prostate, colon, inferior rectal nerves, perineal nerves, scrotal nerves, Alcock's canal, sacro-tuberous ligament, ischial tuberosity, greater sciatic foramen and lesser sciatic foramen or all of their branches or portions; bladder, vagina, anus, external anal sphincter, urethra, penile dorsal nerve and scrotum or their portions; and/or pelvic floor) in or near one the first tissue volume; implanting an implantable drug pump (configured to receive and house a volume of a drug within, and to deliver the drug to their exterior via the implantable drug catheter) within the patient; operably connecting the proximal end of the implantable drug catheter to the implantable drug pump; delivering, from the implantable pulse generator, first electrical stimulation pulses to or near at least portions of the first tissue volume through the first lead and at least the first electrode (where the first pulses are provided in accordance with the first electrical stimulation pulse regime); and delivering from the implantable drug pump a predetermined portion of the drug housed within to the exterior through the implantable drug catheter and to the distal end to or near at least portions of the first tissue volume; where the combination of the first electrical pulse regime delivered through the first lead to or near at least portions of the first tissue volume, and the delivery of the predetermined amount of the drug to first tissue volume, provides to the patient at least partial relief from the pelvic floor disorder. ACTIVITY - Neuroprotective; Uropathic; Laxative; Tranquilizer; Endocrine-Gen.; Vasotropic; Analgesic.

MECHANISM OF ACTION - None given.

USE - The method (of delivering electrical stimuli and drugs to various nerves or tissues) is useful to treat at least one diagnosed pelvic floor disorder (particularly urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic pain, prostatitis, prostatalgia or prostatodynia) in patients (claimed). No biological data given.

ADVANTAGE - The method provides delivery of therapies with a high degree of specificity, ability to change the therapy delivered on demand or instantaneously, and improved physical and electrical coupling of one or more stimulation electrodes to a pertinent nerve or nerve portion; lowers medical care costs in respect of pharmaceutical products; permits stimulation lead implantation surgical procedures to be completed more quickly; and reduces trauma or damage to a patient's pelvic floor anatomy.

L12 ANSWER 75 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-161771 [200517] WPIX
CROSS REFERENCE: 2004-293814; 2004-736013; 2005-110938; 2005-111339;

2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161772; 2005-271993; 2005-403503; 2005-403504; 2008-J47558
DOC. NO. CPI: C2005-052304 [200517]
DOC. NO. NON-CPI: N2005-135721 [200517]
TITLE: Treatment of diagnosed pelvic floor disorder(s) in a patient involves delivering, from implanted pulse generator, first and second electrical stimulation pulses to or near portions of first and second tissue volumes, respectively
DERWENT CLASS: A25; A26; A96; B07; P34; S05; U22
INVENTOR: GERBER M T
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20050033373	A1 20050210	(200517)*	EN	38	[11]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050033373	A1 CIP of	US 2002-236578	20020906
US 20050033373	A1	US 2004-836927	20040430

PRIORITY APPLN. INFO: US 2004-836927 20040430
US 2002-236578 20020906
AN 2005-161771 [200517] WPIX
CR 2004-293814; 2004-736013; 2005-110938; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161772; 2005-271993; 2005-403503; 2005-403504; 2008-J47558
AB US 20050033373 A1 UPAB: 20060121
NOVELTY - Diagnosed pelvic floor disorder(s) in a patient is treated by implanting an implantable pulse generator within the patient; delivering, from the generator, first electrical stimulation pulses to or near portions of a first tissue volume through a first lead and a first electrode; and delivering, from the generator, second electrical stimulation pulses to or near portions of a second tissue volume through a second lead and a second electrode.
DETAILED DESCRIPTION - Treatment of diagnosed pelvic floor disorder(s) in a patient includes providing a hermetically sealed implantable electrical pulse generator configured to provide at least first and second electrical stimulation pulse regimes via at least first and second implantable medical electrical leads; providing the first implantable medical electrical lead configured for implantation adjacent a right sacral nerve or its branches or portions, where the first lead comprises proximal and distal ends and at least a first electrode; providing the second implantable medical electrical lead configured for implantation adjacent a left sacral nerve or its branches or portions, where the second lead comprises proximal and distal ends and at least a second electrode; implanting the first lead in or near a first tissue volume of the patient adjacent, around or in one of the left sacral nerve or its branches or portions; implanting the second lead in or near a second tissue volume of the patient adjacent, around or in one of the right sacral nerve or its branches or portions; operably connecting the proximal end of the first lead to the implantable pulse generator; operably connecting the proximal end of the second lead to the implantable pulse generator; implanting

the implantable pulse generator within the patient; delivering, from the implantable pulse generator, first electrical stimulation pulses to or near portions of the first tissue volume through the first lead and at least the first electrode, where the first pulses are provided in accordance with the first electrical stimulation pulse regime; and delivering, from the implantable pulse generator, second electrical stimulation pulses to or near portions of the second tissue volume through the second lead and at least the second electrode, where the second pulses are provided in accordance with the second electrical stimulation pulse regime. The combination of the first and the second electrical pulse regimes delivered through the first and second leads to or near portions of the first and second tissue volumes provides to the patient at least partial relief from the pelvic floor disorder. The disorder is urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic pain, prostatitis, prostatalgia, or prostatodynia. ACTIVITY - Uropathic; Laxative; Tranquilizer; Endocrine-Gen.; Vasotropic; Analgesic; Antiinflammatory.
MECHANISM OF ACTION - None given.
USE - For treating diagnosed pelvic floor disorder(s) in a patient, where the disorder is urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic pain, prostatitis, prostatalgia, or prostatodynia.
ADVANTAGE - The inventive method avoids or minimizes at least some of the undesirable side effects of sacral nerve stimulation. It directly or effectively treats various pelvic floor disorders. It is capable of providing certain advantages and may help the patient achieve better clinical outcomes.
DESCRIPTION OF DRAWINGS - The figure shows a simplified anatomical view of a pelvic floor of a female human patient. Drug delivery or outlet catheters (300, 301) Implantable drug pump (310)

L12 ANSWER 76 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-141091 [200515] WPIX
CROSS REFERENCE: 2004-418487; 2005-171157
DOC. NO. CPI: C2005-045886 [200515]
DOC. NO. NON-CPI: N2005-120069 [200515]
TITLE: Implantable sensor lead assembly useful in variety of sensor applications, e.g. non-electrode sensing applications comprises outer lead body and inner lead including sensor and positioned in inner conduit of the outer lead body
DERWENT CLASS: B04; P31; S05; U12; V06
INVENTOR: BONDE E; CHRISTOPHERSON M A; POOL N P; SOMMER J L
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20050020895	A1	20050127	(200515)*	EN	17[12]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050020895	A1 Div Ex	US 2002-284897	20021031

US 20050020895 A1 US 2004-919685 20040817

PRIORITY APPLN. INFO: US 2004-919685 20040817
US 2002-284897 20021031
AN 2005-141091 [200515] WPIX
CR 2004-418487; 2005-171157
AB US 20050020895 A1 UPAB: 20050708
NOVELTY - An implantable sensor lead assembly comprises an implantable medical device housing including a channel and an electrical contact housed within channel between two channel openings, an outer lead body (36) and an inner lead (38) including several sensors (39). The sensors are positioned in proximity to second end of inner lead and electrically coupled to electrical contacts of inner lead and electrical contacts of inner lead is positioned in proximity to first end.
DETAILED DESCRIPTION - The first opening of the channel is adapted for mechanical engagement of the proximal end of the outer lead body and both the first opening and the second opening of the channel are adapted for passage of the inner lead through the channel.
An INDEPENDENT CLAIM is included for an implantable lead.
USE - In a wide variety of sensor applications, particularly non-electrode sensing applications in which tissue overgrowth or depletion cause the useful life of the sensor to be limited, e.g. for electrochemical sensors, optical sensors, pressure sensors, blood borne biochemical or chemical sensors, lactate sensors used in the coronary sinus to detect ischemia, sensors for measuring CKMB, sensors for measuring Troponin I, T and C, sensors for measuring myoglobin, sensors for measuring BNP (P-type natriuretic peptide), micro electro mechanical systems (MEMS) sensors or other types of medical sensors for which replacement during the life of the patient is anticipated.
ADVANTAGE - The atraumatic lead configurations for sensors allow for less invasive sensor replacement procedures. Once the electrochemical sensor of the inner lead has been depleted or otherwise exhausted its useful life, the inner lead can be removed, and a new inner lead can be implanted in place of the old inner lead. This replacement procedure is much less invasive and less traumatic than conventional lead replacement procedures, for e.g. while the outer lead body remains substantially in place, the replaceable inner lead avoids substantial contact and attachment to blood vessel tissue during replacement and use. The assembly eliminates implantation procedures for electrochemical sensor replacement. The assembly can improve patient care and comfort, avoid infection, and generally improve therapy to the patient.
DESCRIPTION OF DRAWINGS - The figure shows a simplified schematic of first and second ends of an exemplary implantable lead assembly including an outer lead body and an inner electrochemical lead.
implantable lead assembly (30) outer lead body (36)
conduit (37)
inner lead body (38)
electromagnetic sensor (39)
seal. (42)

L12 ANSWER 77 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-110938 [200512] WPIX
CROSS REFERENCE: 2004-293814; 2004-736013; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161771; 2005-161772; 2005-271993; 2005-403503; 2005-403504; 2008-J47558
DOC. NO. CPI: C2005-037186 [200512]
DOC. NO. NON-CPI: N2005-095832 [200512]
TITLE: Treatment of pelvic floor disorder (e.g. constipation) comprises delivering electrical stimuli and/or drugs to

the pudendal and/or sacral nerves
DERWENT CLASS: A96; B07; P34; S05
INVENTOR: GERBER M T
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20050010260	A1 20050113	(200512)*	EN	39[11]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050010260	A1 CIP of	US 2002-236578	20020906
US 20050010260	A1 CIP of	US 2003-723316	20031126
US 20050010260	A1 CIP of	US 2003-723903	20031126
US 20050010260	A1 CIP of	US 2003-745757	20031223
US 20050010260	A1	US 2004-836840	20040430

PRIORITY APPLN. INFO: US 2004-836840 20040430
US 2002-236578 20020906
US 2003-723316 20031126
US 2003-723903 20031126
US 2003-745757 20031223

AN 2005-110938 [200512] WPIX
CR 2004-293814; 2004-736013; 2005-111339; 2005-121410; 2005-131263; 2005-160739; 2005-161770; 2005-161771; 2005-161772; 2005-271993; 2005-403503; 2005-403504; 2008-J47558
AB US 20050010260 A1 UPAB: 20060121
NOVELTY - Treatment of pelvic floor disorder comprises implantation of medical electrical lead (A) in or near a first tissue volume of the patient; operable connection of proximal end of (A) to an implantable electrical pulse generator (B); implantation of (B), a drug catheter (C) and an implantable drug pump within the patient; and delivery of the housed drug to the exterior through (C) and to the distal end to the portions of the first tissue volume.
DETAILED DESCRIPTION - Treatment of at least one diagnosed pelvic floor disorder (urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic, pain, prostatitis, prostatalgia or prostatodynia) comprises implantation of a first implantable medical electrical lead (A) (being configured for implantation adjacent one of a right and a left sacral nerve or branches or portions; where (A) comprises proximal and distal ends and at least a first electrode) in or near a first tissue volume of the patient adjacent, around or in one of the left and the right sacral nerve or branches or portions; operable connection of the proximal end of (A) to an hermetically sealed implantable electrical pulse generator (B) configured to provide at least a first electrical stimulation pulse regime via at least a first implantable medical electrical lead; implantation of the (B) within the patient; implantation of a drug catheter (C) (configured for implantation adjacent to one of the left sacral nerve or branches or portions, and the right sacral nerve or branches or portions; where (C) comprises proximal and distal ends) in or near one the first tissue volume; implantation of an hermetically sealed implantable drug pump (D) (configured to receive and house a volume of the drug within it, and to deliver a drug to an exterior via (C)) within the patient; operable connection of the proximal end of (C) to (D);

delivery from (B) (first electrical stimulation pulses to or near at least portions of the first tissue volume through the first lead and at least the first electrode, the first pulses being provided in accordance with the first electrical stimulation pulse regime); and delivery from (B) a predetermined portion of the housed drug to the exterior through (C) and to the distal end to or near at least portions of the first tissue volume; where the combination of the first electrical pulse regime delivered through (A) to or near at least portions of the first tissue volume, and the delivery of the predetermined amount of the drug to first tissue volume, provides to the patient at least partial relief from the pelvic floor disorder.
ACTIVITY - Uropathic; Laxative; Tranquilizer; Endocrine-Gen.; Vasotropic; Analgesic.
MECHANISM OF ACTION - None given.
USE - The method is useful to treat at least one diagnosed pelvic floor disorder (urinary voiding dysfunction, fecal voiding dysfunction, constipation, stress incontinence, urge incontinence, urinary retention disorder, sexual dysfunction, orgasmic dysfunction, erectile dysfunction, pelvic pain, prostatitis, prostatalgia or prostatodynia) (claimed). No biological data given.
ADVANTAGE - The method targets the delivery of therapies with a high degree of specificity, has the ability to change the therapy delivered on demand or instantaneously; lowers medical care costs in respect of pharmaceutical products; has the potential to deliver superior therapy; permits the stimulation lead implantation surgical procedures to be completed more quickly; reduces trauma or damage to a patient's pelvic floor anatomy; and improves physical and electrical coupling of one or more stimulation electrodes to a pertinent nerve or nerve portion.

L12 ANSWER 78 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-707937 [200469] WPIX
CROSS REFERENCE: 2003-466092; 2010-E02969
TITLE: Biointerface membrane useful in analyte sensor within implantable device, e.g. cell transplantation device, comprises domain containing solid portion with interconnected cavities to interfere with barrier cell formation
DERWENT CLASS: A25; A26; A96; B04; D22; P31; S03; S05
INVENTOR: BRAUKER J H; SHULTS M C; TAPSAK M A
PATENT ASSIGNEE: (DEXC-N) DEXCOM INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20040186362	A1	20040923	(200469)*	EN	19[7]	
US 7632228	B2	20091215	(200982)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040186362	A1 Cont of	US 2001-916386	20010727
US 20040186362	A1	US 2004-768889	20040129
US 7632228	B2 Cont of	US 2001-916386	20010727
US 7632228	B2	US 2004-768889	20040129

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
US 20040186362	A1	Cont of	US 6702857	B
US 7632228	B2	Cont of	US 6702857	B

PRIORITY APPLN. INFO: US 2004-768889 20040129
US 2001-916386 20010727
AN 2004-707937 [200469] WPIX
CR 2003-466092; 2010-E02969
AB US 20040186362 A1 UPAB: 20060122
NOVELTY - A biointerface membrane comprising a first domain (49) containing a solid portion having several interconnected cavities and a second domain (50) permeable to the passage of an analyte and impermeable to cells or cell processes, where the solid portion comprises silicone, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an implantable device comprising the biointerface membrane.
USE - The biointerface membrane is used in an implantable analyte sensor for implanting in subcutaneous tissue of a host and for measuring an analyte level, e.g. glucose, where the analyte sensor is configured to permit accurate continuous analyte sensing. The biointerface membrane is useful in an implantable device, e.g. cell transplantation device, drug delivery device (preferably pump, microcapsule or macrocapsule), electrical signal measuring device or electrical pulse delivering device. (All claimed).
ADVANTAGE - The membrane promotes tissue ingrowth, interferes with the barrier cell formation on or within, resists barrier cell attachment and blocks cell penetration into the membrane. The membrane allows long-term protection of implanted cells or drugs as well as continuous information regarding, e.g. glucose levels of a host over extended periods of time. DESCRIPTION OF DRAWINGS - The figure shows the membrane. Fibroblast (43)
Blood vessels (45)
Implant membrane (48)
First domain (49)
Second domain. (50)

L12 ANSWER 79 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-624759 [200460] WPIX
DOC. NO. CPI: C2004-224577 [200460]
DOC. NO. NON-CPI: N2004-494101 [200460]
TITLE: Cleaning and impregnation process for tissue implants (e.g. autograft tissue) comprises subjecting the entire tissue implant to high intensity audible sound in a treatment chamber filled with liquids
DERWENT CLASS: A96; B04; D16; D22; P34
INVENTOR: BOGERT D L
PATENT ASSIGNEE: (BOGE-I) BOGERT D L
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20040161362	A1	20040819	(200460)*	EN	10	[2]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 20040161362 A1 Provisional	US 2002-420025P 20021227
US 20040161362 A1	US 2003-679470 20031007

PRIORITY APPLN. INFO: US 2003-679470 20031007
US 2002-420025P 20021227
AN 2004-624759 [200460] WPIX
AB US 20040161362 A1 UPAB: 20050531
NOVELTY - Cleaning and impregnation process for tissue implants (such as autograft tissue, allograft tissue, xenograft tissue and/or tissue from a compound fracture) comprises subjecting the entire tissue implant to high intensity audible sound (20-20,000 cycles per second) in a treatment chamber filled with liquids.
DETAILED DESCRIPTION - A cleaning and impregnation process for tissue implants (II) (such as autograft tissue, allograft tissue, xenograft tissue and/or tissue from a compound fracture) comprising subjecting the entire tissue implant to harmonically intensified audible sound (20-20,000 cycles/second) in a treatment chamber filled with liquids, where the walls of the treatment chamber are vibrated at a frequency such as to induce resonant harmonic oscillations in a liquid column in the treatment chamber at the first harmonic of the liquid column. An INDEPENDENT CLAIM are also included for partially sterilizing tissues for implanting where the tissue is treated in 50-100% pure oxygen at pressures of 2-20 atmospheres and at 2-10 degreesC for more than one hour.
USE - This method is used for cleaning and impregnation process for tissue implants (such as autograft tissue, allograft tissue, xenograft tissue and/or tissue from a compound fracture) (claimed).
ADVANTAGE - This audible acoustic cleaning process for implants:
(a) removes or kills viruses, fungi, bacteria and other potential disease organisms, thus being capable of sterilizing tissue to the current FDA;
(b) does not severely impact the strength of the implants ;
(c) does not affect the ability of the donor tissue to act as a scaffold and encourages the growth of the host's tissue into the graft (osteoinductivity and osteoconductivity); (d) removes endogenous materials in the transplants to prevent inflammatory and immune reactions; and (e) does not require large amounts of expensive sterile water and chemicals per treatment.
The treatment chamber in (I) is small enough to be portable , allowing loading, unloading and chamber sterilization to take place other than in the treatment room or enclosure; and the process is inexpensive.

L12 ANSWER 80 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-561546 [200454] WPIX
DOC. NO. CPI: C2004-205156 [200454]
DOC. NO. NON-CPI: N2004-444331 [200454]
TITLE: Stent graft useful for treating patient having aneurysm e.g. abdominal aortic aneurysm comprises endoluminal stent, graft and silk
DERWENT CLASS: A96; B05; B07; D22; P32; P34
INVENTOR: GRAVETT D M; GUAN D; HU Z; MAITI A; SIGNORE P; SIGNORE P E; TOLEIKIS P M; WANG K
PATENT ASSIGNEE: (ANGI-N) ANGIOTECH INT AG; (ANGI-N) ANGIOTECH INT GMBH
COUNTRY COUNT: 106

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 2004060424	A2 20040722	(200454)*	EN	113[12]	

US 20040199241 A1 20041007 (200466) EN
AU 2003300022 A1 20040729 (200477) EN
EP 1581270 A2 20051005 (200565) EN
CN 1732022 A 20060208 (200643) ZH
JP 2006516202 W 20060629 (200643) JA 100
KR 2005091040 A 20050914 (200648) KO
IN 2005KN01222 P2 20061124 (200703) EN

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004060424 A2		WO 2003-US41494	20031229
US 20040199241 A1	Provisional	US 2002-437463P	20021230
AU 2003300022 A1		AU 2003-300022	20031229
CN 1732022 A		CN 2003-80108096	20031229
EP 1581270 A2		EP 2003-800285	20031229
US 20040199241 A1		US 2003-748747	20031229
EP 1581270 A2		WO 2003-US41494	20031229
JP 2006516202 W		WO 2003-US41494	20031229
KR 2005091040 A		WO 2003-US41494	20031229
JP 2006516202 W		JP 2004-565789	20031229
KR 2005091040 A		KR 2005-712333	20050629
IN 2005KN01222 P2		WO 2003-US41491	20031229
IN 2005KN01222 P2		IN 2005-KN1222	20050623

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2003300022	A1	Based on	WO 2004060424	A
EP 1581270	A2	Based on	WO 2004060424	A
JP 2006516202	W	Based on	WO 2004060424	A
KR 2005091040	A	Based on	WO 2004060424	A

PRIORITY APPLN. INFO: US 2002-437463P 20021230
US 2003-748747 20031229
AN 2004-561546 [200454] WPIX
AB WO 2004060424 A2 UPAB: 20060122
NOVELTY - A stent graft comprises an endoluminal stent, a graft and a silk.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (1) forming a stent graft involving adhering the silk to the stent graft;
(2) treating a patient having an aneurysm, comprising delivering the stent graft;
(3) bypassing disease within a vessel, involving delivering the stent graft such that vessel contents bypass the diseased portian of the vessel;
(4) creating communication between an artery and a vein, involving delivering the stent graft such that a passageway is created between the artery and vein;
(5) creating communication between a first vein and a second vein, involving delivering the stent graft such that a passageway is created between the first and second veins. ACTIVITY - None given.
MECHANISM OF ACTION - None given.
USE - For treating a patient having an aneurysm (e.g. an abdominal aortic aneurysm, a thoracic aortic aneurysm, or an iliac aortic aneurysm). For reducing perigraft leakage associated with stent. For bypassing disease within a vessel and creating communication between an artery and a vein and between two veins (claimed). To connect one artery to another to bypass aneurysms (e.g. carotid artery, thoracic aorta, abdominal aorta, subclavian artery, iliac artery, coronary artery, venous), to treat dissection (e.g. carotid

artery, coronary artery, iliac artery, subclavian artery), to bypass long segment disease or to treat local rupture (e.g. carotid artery, aorta, iliac artery, renal artery, femoral artery).
ADVANTAGE - The silk induces fibrosis and adhesion between the stent graft and animal tissue.

L12 ANSWER 81 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-546155 [200453] WPIX
DOC. NO. CPI: C2004-200300 [200453]
DOC. NO. NON-CPI: N2004-431781 [200453]
TITLE: Biomedical device useful for growing cells or tissues, has surface coated with coating comprising one or more layers adapted to change with time
DERWENT CLASS: A96; B07; D16; D22; P34
INVENTOR: GOLD J; PETRONIS S; WENNERBERG A
PATENT ASSIGNEE: (GOLD-I) GOLD J; (PETR-I) PETRONIS S; (WENN-I) WENNERBERG A
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
GB 2397233	A	20040721	(200453)*	EN	20	[2]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
GB 2397233	A	GB 2003-1238	20030120

PRIORITY APPLN. INFO: GB 2003-1238 20030120
AN 2004-546155 [200453] WPIX
AB GB 2397233 A UPAB: 20050531
NOVELTY - A biomedical device (2) (I) has a surface with a given topography, where the surface is coated with a coating (1) comprising one or more layers (1a,1b,1c) that is adapted to change with time and that the outermost surface of the coating has a different topography than the underlying biomedical device.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) a precursor (II) to a bioerodable material, where (II) is intended to be applied to (I) comprising a material having a defined surface topography and accumulates into pores and valleys of the surface thus making the surface less rough and that (II) is adapted to harden to a solid coating of the bioerodable material on (I), and the coating is stable in air but is degradable, meltable and/or resorbable upon contact with a biological environment;
(2) preparing (I) having a given topography, involves preparing a precursor phase of a bioerodable material, depositing the precursor phase on (I) such that it accumulates into cavities and pores of the surface thus changing its topography, bringing the precursor phase to harden thus forming a solid coating of the bioerodable polymeric material on (I), where the coating is stable in air but is degradable, meltable and/or resorbable upon contact with a biological environment; and (3) applying (I) having a defined surface topography into a biological environment, involves applying a coating comprising one or more layers on (I), where the outermost surface of the coating has a different topography than the underlying (I), and the coating is adapted to change with time in contact with a biological environment, and

applying the coated biomedical device into a biological environment, at which the coating changes with time.
USE - (I) is useful for growing cells or tissues (claimed). (I) is useful in clinics and laboratories. (I) such as tissue engineering scaffold is useful in vitro or in vivo to generate tissues or organs from group of cells growing on some form of porous, 3-dimensional shaped substrate. The patterned surface topography is useful in guiding and/or orienting cells to specific locations on the surface. The coating of (I) is useful in application, such as for stimulators for bone growth and remodeling, nerve guides, biosensors, intraocular lenses, image enhancement during insertion or post implantation follow-up (for e.g., by ultrasound, X-ray, etc.,) etc.
ADVANTAGE - (I) is adapted to have different surface topographies at different time periods. The coating of (I), comprising one or more layers is adapted to change with time. The coating comprises a bioerodable material, which degrades when contacted with biological environment. The coating is stable in air (claimed). (I) such as bone implant or cardiovascular stent has smooth surface to facilitate their insertion into bone or blood vessels, such that the surface then becomes rough to improve the implant fixation and stability. The additional coating layers of (I) have a different functional topography adapted for optimized healing and performance of the implant in the body. (I) such as an implant, has a reduced initial inflammatory reaction, which may be caused when inserting an implant having a rough surface, an induced faster tissue regeneration around the implant, due to reduced destruction of contacting tissue, a better stability of original implant surface during the storage, transportation and insertion periods, an improved implant integration and thus lower long-term failure rate, and a faster healing and patient treatment. DESCRIPTION OF DRAWINGS - The figures show schematic representation of biomedical device provided with smooth coating and multi-layer coating.
coating (1)
layers (1a,1b,1c)
biomedical device (2)
surface roughness (3)
bioactive substances (4)

L12 ANSWER 82 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-420036 [200439] WPIX
DOC. NO. CPI: C2004-157679 [200439]
DOC. NO. NON-CPI: N2004-333449 [200439]
TITLE: Implantable device for improving heart valve function comprises first anchor configured to be secured to heart tissue, second anchor configured to be secured to heart tissue, and interconnecting member connecting first and second anchors
DERWENT CLASS: B07; P31; P32; P34
INVENTOR: EKVALL C; EKVALL C A; KALGREEN J; KALGREEN J E; KUSZ D; MATTHEES E; MORTIER T; MORTIER T J; SCHROEDER R; SCHWEICH C; SCHWEICH C J; VIDLUND R; VIDLUND R M; MOTIER T
PATENT ASSIGNEE: (EKVA-I) EKVALL C; (KALG-I) KALGREEN J; (KUSZ-I) KUSZ D; (MATT-I) MATTHEES E; (MORT-I) MORTIER T J; (MYOC-N) MYOCOR INC; (SCHR-I) SCHROEDER R; (SCHW-I) SCHWEICH C J; (VIDL-I) VIDLUND R M; (EDLI-C) EDWARDS LIFESCIENCES LLC
COUNTRY COUNT: 107

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004043265	A2	20040527	(200439)*	EN	114[31]	

US 20040148019	A1	20040729 (200450)	EN
US 20040148020	A1	20040729 (200450)	EN
AU 2003295380	A1	20040603 (200470)	EN
EP 1560526	A2	20050810 (200552)	EN
US 20060036317	A1	20060216 (200614)	EN
US 20060100699	A1	20060511 (200633)	EN
US 7112219	B2	20060926 (200663)	EN
EP 1560526	B1	20070606 (200738)	EN
US 7247134	B2	20070724 (200749)	EN
DE 60314273	E	20070719 (200755)	DE
EP 1862128	A1	20071205 (200781)	EN
DE 60314273	T2	20080207 (200813)	DE
US 7666224	B2	20100223 (201015)	EN

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004043265	A2	WO 2003-US35037	20031112
US 20040148019	A1 Provisional	US 2002-425519P	20021112
US 20040148020	A1 Provisional	US 2002-425519P	20021112
US 20060036317	A1 Provisional	US 2002-425519P	20021112
US 20060100699	A1 Provisional	US 2002-425519P	20021112
US 7112219	B2 Provisional	US 2002-425519P	20021112
US 7247134	B2 Provisional	US 2002-425519P	20021112
US 20040148019	A1	US 2003-704143	20031110
US 20060036317	A1 Cont of	US 2003-704143	20031110
US 7112219	B2	US 2003-704143	20031110
US 20040148020	A1	US 2003-704145	20031110
US 20060100699	A1 Cont of	US 2003-704145	20031110
US 7247134	B2	US 2003-704145	20031110
AU 2003295380	A1	AU 2003-295380	20031112
DE 60314273	E	DE 2003-60314273	20031112
DE 60314273	T2	DE 2003-60314273	20031112
EP 1560526	A2	EP 2003-786565	20031112
EP 1560526	B1	EP 2003-786565	20031112
DE 60314273	E	EP 2003-786565	20031112
EP 1862128	A1 Div Ex	EP 2003-786565	20031112
DE 60314273	T2	EP 2003-786565	20031112
EP 1560526	A2	WO 2003-US35037	20031112
EP 1560526	B1	WO 2003-US35037	20031112
DE 60314273	E	WO 2003-US35037	20031112
DE 60314273	T2	WO 2003-US35037	20031112
US 20060036317	A1	US 2005-175270	20050707
US 20060100699	A1	US 2005-254794	20051021
EP 1862128	A1	EP 2007-109612	20031112
US 7666224	B2 Provisional	US 2002-425519P	20021112
US 7666224	B2 Cont of	US 2003-704143	20031110
US 7666224	B2	US 2005-175270	20050707

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60314273	E	Based on	EP 1560526	A
EP 1862128	A1	Div ex	EP 1560526	A
DE 60314273	T2	Based on	EP 1560526	A
AU 2003295380	A1	Based on	WO 2004043265	A
EP 1560526	A2	Based on	WO 2004043265	A

EP 1560526	B1	Based on	WO 2004043265	A
DE 60314273	E	Based on	WO 2004043265	A
DE 60314273	T2	Based on	WO 2004043265	A
US 7666224	B2	Cont of	US 7112219	B

PRIORITY APPLN. INFO: US 2003-704143 20031110
US 2002-425519P 20021112
US 2003-704145 20031110
US 2005-175270 20050707
US 2005-254794 20051021

AN 2004-420036 [200439] WPIX

AB WO 2004043265 A2 UPAB: 20060121
NOVELTY - An implantable device (10) comprises first anchor configured to be secured to heart tissue, second anchor configured to be secured to heart tissue, and interconnecting member (16) connecting the first and second anchors. The interconnecting member is configured to be selectively adjustable to alter a tension of the interconnecting member between first and second anchors.
DETAILED DESCRIPTION - Implantable device comprises first anchor to be secured to heart tissue, second anchor to be secured to heart tissue, and interconnecting member connecting the first and second anchors. The interconnecting member is configured to be selectively adjustable to alter a tension of the interconnecting member between first and second anchors. The portion of the interconnecting member is configured to be positioned in contact with an external surface of a heart wall proximate a valve so that the device exerts an inward force on the heart wall sufficient to alter the valve function.
USE - For improving heart valve function (claimed), e.g. dysfunctional heart valve.
ADVANTAGE - The invention reduces regurgitation while maintaining normal leaflet motion, reduces the overall time a patient is in surgery and under the influence of anesthesia, treats the valve insufficiency to reduce the risk of bleeding associated with anticoagulation requirements of cardiopulmonary bypass, and allows the practitioner an opportunity to assess the efficacy of the treatment and potentially address any inadequacies without the need for additional bypass support.
DESCRIPTION OF DRAWINGS - The figure is bottom side view of an implantable device utilizing a protrusion. Implantable device (10)
Anchor ends (12, 14)
Interconnecting member (16)
Protrusion (18)

L12 ANSWER 83 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-356201 [200433] WPIX
CROSS REFERENCE: 1999-633313
TITLE: New human polynucleotides encoding human criptin growth factor polypeptides, useful for wound healing or tissue regeneration, stimulating implant fixation and angiogenesis, and for treating and/or preventing tumor
DERWENT CLASS: B04; D16
INVENTOR: COLEMAN T A; MEISSNER P S
PATENT ASSIGNEE: (HGSI-C) HUMAN GENOME SCI INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC

US 20040086967	A1 20040506 (200433)* EN	19[2]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040086967	A1 Div Ex	US 1995-471371	19950606
US 20040086967	A1 Cont of	US 1999-393023	19990909
US 20040086967	A1	US 2003-665602	20030922

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 20040086967	A1 Div ex	US 5981215 A

PRIORITY APPLN. INFO: US 2003-665602 20030922
US 1999-393023 19990909
US 1995-471371 19950606

AN 2004-356201 [200433] WPIX
CR 1999-633313
AB US 20040086967 A1 UPAB: 20050528
NOVELTY - A polynucleotide encoding a polypeptide comprising amino acids 1-223, 24-223, 24-173, or 24-128 of a sequence of 223 amino acids (P1) fully defined in the specification, or its fragment, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a vector containing the DNA; (2) a host cell genetically engineered with the vector; (3) a process for producing a polypeptide by expressing the polypeptide from the host cell; (4) a process for producing cells capable of expressing polypeptide by genetically engineering cells with the vector; (5) a polypeptide encoded by the polynucleotide; (6) a compound that activates a receptor for the polypeptide; (7) a compound that inhibits the polypeptide; (8) an antibody against the polypeptide; (9) processes for identifying compounds that inhibit activation, or activate the receptor of the polypeptide; (10) a process for diagnosing a disease or a susceptibility to a disease related to a mutation in the polynucleotide by determining a mutation in the polynucleotide; and (11) a diagnostic process comprising analyzing for the presence of the polypeptide in a sample derived from a host. ACTIVITY - Cytostatic; Vulnerary.
MECHANISM OF ACTION - Criptin growth factor inhibitor; Gene therapy.
USE - The polynucleotides and polypeptides are useful for wound healing or tissue regeneration, stimulating implant fixation and angiogenesis. They are also useful for treating and/or preventing neoplasia, e.g. tumor.

L12 ANSWER 84 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-180221 [200417] WPIX
DOC. NO. CPI: C2004-071183 [200417]
TITLE: Therapeutic device for tissue regeneration, comprising biodegradable polymer that biodegrades to provide sustained release of anti-inflammatory compound to tissue
DERWENT CLASS: A26; A96; B04; B05; D22
INVENTOR: SCHMALENBERG K; UHRICH K E
PATENT ASSIGNEE: (SCHM-I) SCHMALENBERG K; (UHRI-I) UHRICH K E; (RUTF-C) UNIV RUTGERS STATE NEW JERSEY
COUNTRY COUNT: 103

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004006863	A2	20040122	(200417)*	EN	72[7]	
US 20040096476	A1	20040520	(200434)	EN		
AU 2003251992	A1	20040202	(200450)	EN		
AU 2003251992	A8	20051103	(200629)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004006863	A2	WO 2003-US22361	20030717
US 20040096476	A1 Provisional	US 2002-396628P	20020717
AU 2003251992	A1	AU 2003-251992	20030717
US 20040096476	A1	US 2003-622072	20030717
AU 2003251992	A8	AU 2003-251992	20030717

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2003251992	A1	Based on	WO 2004006863	A
AU 2003251992	A8	Based on	WO 2004006863	A

PRIORITY APPLN. INFO: US 2002-396628P 20020717
US 2003-622072 20030717

AN 2004-180221 [200417] WPIX

AB WO 2004006863 A2 UPAB: 20050528

NOVELTY - A therapeutic device (TD) for tissue regeneration, comprising a biodegradable polymer that biodegrades to provide sustained release of an anti-inflammatory compound to a tissue. ACTIVITY - Antiinflammatory. In vivo implantation of anti-inflammatory polymeric substrates promoting healing and effect of polymeric substrate (bioactive polymer or implant) and a chemically similar polyanhydride (control polyanhydride) on the healing process was analyzed as follows. The polymers were compression-molded into films with thicknesses of 0.1, 0.2 and 0.3 mm and cut into 0.5 mm wide strips. Mice (n=10) were anesthetized and the palatal gingival mucosa adjacent to the maxillary first molar was reflected to expose the palatal and alveolar bone. A polymer film was then placed on the bone adjacent to the tooth. The tissue was repositioned and the procedure was repeated on the contra lateral side. Polymer films were randomly placed (left versus right) with each mouse carrying both polymers. Mice were fed a ground diet and water and weighed weekly. Mice were sacrificed at 1,4 and 20 days post-surgical insertion. visual intraoral examination of the mucosa covering the implantation sites was performed with a dissecting microscope under optimum lighting. Polymer membranes of thicknesses 0.1 and 0.2 mm were not visible under the microscope at 4 and 20 days post insertion. However, thicker membranes (0.3 mm) were still observable after 20 days. In mice receiving the control polyanhydride films, the mucosa was red and thin near the implant with the surrounding tissue inflamed at days 1 and 4. By day 14, the tissue was slightly puffy in three animals and within normal limits for the remaining 5 animals. In contrast, the tissue surrounding the bioactive polymer implants was slight puffy after day 1 but within normal limits in all animals by day 4. Histological examination of tissues from the mice was also performed and correlated well with visual observations. One mouse was sacrificed 24 hours post implantation and there was no significant difference between the bioactive and control side except for the decrease in swelling on the

bioactive side. On analysis two mice were sacrificed four days post implantation had some polymeric material remained in all sites. The 0.1 mm film was in direct contact with the palatal bone. An extensive, thin layer of palatal epithelium was observed that surrounded portions of the polymer specimens. The extent of the epithelium along the membranes was greater for the bioactive than for the control polyanhydride site. The infiltrate was denser below the epithelium adjacent to the membrane. Six mice were sacrificed at twenty days post implantation and small remnants of a 0.3 mm film in only one specimen were present. Tissue specimens with bioactive polymer showed no alveolar bone, cement um and dentine resorption. However, a significant amount of new bone was observed coronal to the reversal lines in the sites bearing bioactive films. Quantitative analyses were also performed through electronic images taken of the tissue sections. Sections were taken from mice sacrificed after 20 days from membranes that were either 0.3 or 2 mm thick. Thus implantation of a film comprising an aromatic polyanhydride that hydrolyzed to form a therapeutically useful anti-inflammatory agent (a salicylate) resulted in less swelling in tissues adjacent to the film and a decrease in the density of inflammatory cells as compared to other polyanhydride films.
MECHANISM OF ACTION - None given.
USE - TD is useful for regenerating tissue, which involves implanting a device into a mammal (claimed). TD is useful for spatially directing cellular growth and directing outgrowth of neurons for the repair of peripheral and central nervous system damage.
ADVANTAGE - TD efficiently useful in regenerating tissue and effectively directing cell growth. The cells grown in vitro under common laboratory condition or cells grown in vivo upon effective implantation of the device into a living mammal.
DESCRIPTION OF DRAWINGS - The figure shows graph representing the average orientation of the monolayer of Schwann cells plated on a pattern of laminin lines.

L12 ANSWER 85 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-132226 [200413] WPIX
DOC. NO. CPI: C2004-052812 [200413]
DOC. NO. NON-CPI: N2004-105601 [200413]
TITLE: Treatment of obesity involves inserting pyloric bulking device below the mucosa in the vicinity of pyloric sphincter to close the pylorus lumen to slow emptying of the stomach when the pyloric sphincter is relaxed
DERWENT CLASS: A96; D22; P32
INVENTOR: STARKEBAUM W L
PATENT ASSIGNEE: (STAR-I) STARKEBAUM W L
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20040019388	A1	20040129	(200413)*	EN	16[6]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040019388	A1	US 2002-202316	20020724

PRIORITY APPLN. INFO: US 2002-202316 20020724
AN 2004-132226 [200413] WPIX

AB US 20040019388 A1 UPAB: 20050528
NOVELTY - Obesity is treated by providing a pyloric bulking device having a predetermined form and inserting the bulking device below the mucosa (46) in the vicinity of a pyloric sphincter to close the pylorus (34) lumen (40) to slow emptying of the stomach when the pyloric sphincter (48) is relaxed.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (a) a method of decreasing the pylorus lumen of the pyloric sphincter, comprising trans-pyloricly introducing an endoscope to a treatment site in the vicinity of the pyloric sphincter; providing an access pathway through the mucosa; and introducing a pyloric bulking device into the wall of the pylorus below the mucosa, so that the pyloric bulking device cooperates with the pyloric sphincter to close the pylorus lumen to slow emptying of the stomach when the pyloric sphincter is relaxed; and
(b) a method for creating a restriction in the gastrointestinal tract extending from the pylorus through the colon in a body of a mammal to reduce food consumption, comprising introducing at least one nonaqueous solution through the mucosa into the submucosa (44) or muscle layer of the wall, and forming from the at least one nonaqueous solution a mass of non-biodegradable bulking agent within the gastrointestinal wall to reduce the cross-section of the tract lumen to slow passage of contents of the gastrointestinal tract.
The gastrointestinal tract is defined by a gastrointestinal tract wall having an interior mucosa, a submucosa, and a muscle layer surrounding a tract lumen.
ACTIVITY - Anorectic.
MECHANISM OF ACTION - None given.
USE - For treating obesity.
ADVANTAGE - The invention is simple to implement and overcomes the disadvantages of the prior art procedures. DESCRIPTION OF DRAWINGS - The figure shows an expanded partial cross-section view of the stomach and pylorus depicting the access to the submucosal implantation sites.
Pylorus (34)
Pylorus lumen (40)
Submucosa (44)
Mucosa (46)
Sphincter (48)

L12 ANSWER 86 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-118877 [200412] WPIX
CROSS REFERENCE: 1996-097626; 1999-508171; 2002-171698; 2003-553676; 2007-571015
TITLE: Polynucleotides encoding growth factor polypeptides useful for enhancing the repair of connective tissue and support tissue
DERWENT CLASS: B04; D16; D21; D22
INVENTOR: ADAMS M D; LI H
PATENT ASSIGNEE: (HGSI-C) HUMAN GENOME SCI INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20030078391	A1	20030424	(200412)*	EN	19[1]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030078391	A1 CIP of	WO 1994-US7736	19940712

US 20030078391 A1 Div Ex US 1995-459101 19950602
US 20030078391 A1 Div Ex US 1999-348815 19990708
US 20030078391 A1 US 2002-294796 20021115

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 20030078391 A1	Div ex	US 5945300 A

PRIORITY APPLN. INFO: US 2002-294796 20021115
WO 1994-US7736 19940712
US 1995-459101 19950602
US 1999-348815 19990708

AN 2004-118877 [200412] WPIX
CR 1996-097626; 1999-508171; 2002-171698; 2003-553676; 2007-571015
AB US 20030078391 A1 UPAB: 20091214
NOVELTY - An isolated polynucleotide (I) comprising: (a) a polynucleotide encoding the polypeptide comprising amino acid 1 to 381 of a fully defined 382 amino acid sequence given in the specification (SEQ ID NO:2);
(b) a polynucleotide encoding the polypeptide comprising amino acid 25 to 381 of SEQ ID NO:2
(c) a polynucleotide capable of hybridizing to and which is at least 70% identical to (a) or (b); or
(d) a polynucleotide fragment of (a), (b) or (c), is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an isolated polynucleotide (II) comprising a member selected from the group consisting of:
(a) a polynucleotide which encodes a mature polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit Number 75804;
(b) a polynucleotide which encodes a polypeptide having the amino acid sequence expressed by the DNA contained in ATCC Deposit Number 75804; (c) a polynucleotide capable of hybridizing to and which is at least 70% identical to the polynucleotide of (a); and (d) a polynucleotide fragment of the polynucleotide of (a), (b) or (c);
(2) a vector (III) containing (I); (3) a host cell (IV) genetically engineered with (III); (4) producing (M1) a polypeptide comprising expressing from (IV) the polypeptide encoded by (I);
(5) producing (M2) cells capable of expressing a polypeptide comprising genetically engineering cells with (III); (6) a polypeptide (V) encoded by (I) comprising: (a) a mature polypeptide having the deduced amino acid sequence of SEQ ID NO:2 and fragments, analogs and derivatives of it; and (b) a mature polypeptide encoded by the cDNA of ATCC Deposit Number 75804 and fragments, analogs and derivatives of the polypeptide. (7) a compound (VI) which inhibits activation of the receptor for (V);
(8) a compound (VII) which activates the receptor for (V); (9) treating (M3) a patient having need of connective tissue growth factor-2 (CTGF-2) comprising administering (V);
(10) treating (M4) a patient having need to inhibit a CTGF-2 polypeptide comprising administering (VI) (11) diagnosing (M5) a disease or a susceptibility to a disease related to an under-expression of (V) comprising determining a mutation in a nucleic acid sequence encoding (V); (12) a diagnostic process (M6) comprising analyzing for the presence of (V) in a sample derived from a host; and (13) identifying (M7) agonist or antagonist compounds to (V) comprising:
(a) contacting a cell expressing a receptor for the polypeptide on its surface, the receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor, with an analytically detectable compound under conditions to permit

binding to the receptor; and (b) detecting the absence or presence of a signal generated from the interaction of the compound with the receptor. ACTIVITY - Vulnerary; Antiseborrheic; Dermatological; Osteopathic. No biological data given.
MECHANISM OF ACTION - Gene Therapy; CTGF-2-Agonist; CTGF-2-Antagonist.
USE - (M1) is useful for preparing (V). (M2) is useful for reparing (IV). (M3) is useful for treating a patient having need of connective tissue growth factor-2 (CTGF-2). (M4) is useful for treating a patient having need to inhibit a CTGF-2 polypeptide. (M5) is useful for diagnosing a disease or a susceptibility to a disease related to an under-expression of (V). (M7) is useful for identifying agonists anfd antagonists of (V) (claimed). (V) are useful for enhancing the repair of connective and support tissue e.g. CTGF-2 may be used to treat skin disorders such as injuries, acne, aging, UV damage or burns. CTGF-2 may also be used to improve the cosmetic appearance of the skin, for example, by treating wrinkled skin. CTGF-2 may also be employed to promote the attachment, fixation and stabilization of tissue implants, for example, a prosthesis and other implants inserted during reconstructive surgery. (V) may be employed in the healing of external wounds by promoting growth of epithelial and connective tissues and the synthesis of total protein and collagen. CTGF-2 may be applied in the area of injured or depleted bones, with regeneration occurring by promoting the growth of connective tissue, bone and cementum and by stimulating protein and collagen synthesis which is especially useful for periodontal disease. (I) is useful as a diagnostic. (I) is also useful as a hybridization probe.

L12 ANSWER 87 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-020664 [200402] WPIX
CROSS REFERENCE: 2003-830656; 2004-190702; 2005-618204; 2005-618205; 2005-618206; 2005-638459
DOC. NO. CPI: C2004-006413 [200402]
DOC. NO. NON-CPI: N2004-015852 [200402]
TITLE: Sterile composite graft for use in orthopedic surgical procedures, comprises two bone blocks defining central through going bore and longitudinal channel cut(s)
DERWENT CLASS: A96; B04; B07; D22; P32
INVENTOR: GERTZMAN A A; STEINER A J
PATENT ASSIGNEE: (MUSC-N) MUSCULOSKELETAL TRANSPLANT FOUND; (STEI-I) STEINER A J
COUNTRY COUNT: 100

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20030171810	A1 20030911	(200402)*	EN	12[3]	
WO 2003075800	A1 20030918	(200402)	EN		
US 6730124	B2 20040504	(200430)	EN		
AU 2003225598	A1 20030922	(200431)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030171810	A1 CIP of	US 2002-92537	20020308
US 20030171810	A1	US 2002-277838	20021023
AU 2003225598	A1	AU 2003-225598	20030307
WO 2003075800	A1	WO 2003-US5576	20030307

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003225598 A1	Based on	WO 2003075800 A

PRIORITY APPLN. INFO: US 2002-277838 20021023
US 2002-92537 20020308
AN 2004-020664 [200402] WPIX
CR 2003-830656; 2004-190702; 2005-618204; 2005-618205; 2005-618206; 2005-638459
AB US 20030171810 A1 UPAB: 20060120
NOVELTY - A sterile composite graft comprises two bone blocks. Each bone block defines a central through going bore, and longitudinal channel cut(s). The central through going bore has cross-section allowing a ligament replacement to be passed there through. The longitudinal channel cut(s) is parallel to the axis of the central through going bore in the exterior surface of the bone block and a ligament replacement mounted to the bone blocks.
DETAILED DESCRIPTION - A sterile composite graft comprises two bone blocks. Each bone block defines a central through going bore, and longitudinal channel cut(s). The central through going bore has cross-section that allow a ligament replacement to be passed there through. The longitudinal channel cut(s) is parallel to the axis of the central through going bore in the exterior surface of the bone block with the opposite side defining a flat longitudinal surface and a ligament replacement mounted to the bone blocks. The ligament replacement extends through the central bore of the bone blocks and around the two bone blocks in the longitudinal flat surface.
INDEPENDENT CLAIMS are included for: (1) a sterile bone-tendon-bone assembly comprising cylindrical allograft bone block, and recessed path ways tendon replacement mechanism; (2) sterile bone block used in implants comprising arcuate bone block body (30) with central through going bore and parallel channel cut(s); and
(3) sterile reconstruction cruciate tendon assembly comprising two allograft cylindrical bone blocks, channel cut, and tendon replacement strand.
USE - For use in orthopedic surgical procedures.
ADVANTAGE - The invention provides compression strength to the implant bone construct. It provides mechanical strength characteristics of natural bone-tendon-bone to provide overall strength and initial durability to the structure. It provides a pre-machined bone derived structure that can effectively promote new bone growth and accelerates healing. It is design to provide thinner bone block cross sectional diameter. It can be easily handled by physician during surgery, thus eliminates, or reduces the physician from carving the respective bone blocks.
DESCRIPTION OF DRAWINGS - The figure shows a perspective view of the bone-tendon-bone assembly implanted in knee joint. Tibia (22)
Femur (24)
Bone tunnel (25)
Sutures (26)
Fixation screw (28)
Screw (28)
Bone block body (30)
Looped tendon (50)

L12 ANSWER 88 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-903549 [200382] WPIX
DOC. NO. CPI: C2003-256992 [200382]
TITLE: Tissue graft construct useful for repairing diseased or

damaged tissues comprises a matrix composition and endothelial cells

DERWENT CLASS: B04; D16; D22; P32; P34
INVENTOR: BADYLAK S F
PATENT ASSIGNEE: (BADY-I) BADYLAK S F; (PURD-C) PURDUE RES FOUND
COUNTRY COUNT: 102

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003092604	A2	20031113	(200382)*	EN	30	[1]
US 20030216812	A1	20031120	(200410)	EN		
AU 2003243184	A1	20031117	(200442)	EN		
EP 1503789	A2	20050209	(200512)	EN		
JP 2005533535	W	20051110	(200574)	JA	21	
CN 1665527	A	20050907	(200607)	ZH		
NZ 536564	A	20080530	(200841)	EN		
AU 2003243184	B2	20080911	(200925)	EN		
US 20090324681	A1	20091231	(201002)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003092604	A2	WO 2003-US13555	20030501
US 20030216812	A1 Provisional	US 2002-377565P	20020502
AU 2003243184	A1	AU 2003-243184	20030501
AU 2003243184	B2	AU 2003-243184	20030501
CN 1665527	A	CN 2003-815572	20030501
EP 1503789	A2	EP 2003-747631	20030501
NZ 536564	A	NZ 2003-536564	20030501
EP 1503789	A2	WO 2003-US13555	20030501
JP 2005533535	W	WO 2003-US13555	20030501
NZ 536564	A	WO 2003-US13555	20030501
US 20030216812	A1	US 2003-428355	20030502
JP 2005533535	W	JP 2004-500789	20030501
US 20090324681	A1 Provisional	US 2002-377565P	20020502
US 20090324681	A1 Div Ex	US 2003-428355	20030502
US 20090324681	A1	US 2009-557176	20090910

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2003243184	A1	Based on	WO 2003092604	A
EP 1503789	A2	Based on	WO 2003092604	A
JP 2005533535	W	Based on	WO 2003092604	A
NZ 536564	A	Based on	WO 2003092604	A
AU 2003243184	B2	Based on	WO 2003092604	A

PRIORITY APPLN. INFO: US 2002-377565P 20020502
US 2002-377565P 20020502
US 2003-428355 20030502
US 2009-557176 20090910
AN 2003-903549 [200382] WPIX
AB WO 2003092604 A2 UPAB: 20060203

NOVELTY - A tissue graft construct having vessel-like structures comprises a matrix composition, endothelial cells, and at least one population of cells. The matrix composition is selected from liver basement membrane or their extracts and hydrolysates or processed collagen from vertebrate nonsubmucosal sources. The population of cells enhances the initiation of formation of the vessel-like structures.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: (1) enhancing vascularization in vivo of a tissue graft construct; (2) preparation of tissue graft construct; and (3) a vascularized tissue graft construct comprising a matrix composition, endothelial cells cultured on the matrix composition to form vessels or vessel -like structures in vitro and at least one population of cells.
USE - For repairing diseased or damaged tissues and for enhancing vascularization in vivo (claimed).
ADVANTAGE - The tissue graft constructs are substantially acellular matrices that provide a superior cell growth substrate resembling the matrix environment found in vivo, promotes the attachment and proliferation of cells in vitro and induces tissue remodeling when the graft constructs are implanted in vivo and promotes growth or regrowth of endogenous tissue.

L12 ANSWER 89 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-903379 [200382] WPIX
CROSS REFERENCE: 1998-446909; 2001-070682
DOC. NO. CPI: C2003-256845 [200382]
DOC. NO. NON-CPI: N2003-721340 [200382]
TITLE: Apparatus useful for treating pathologies of connective tissues tendonitis comprises a member for covering and securing a joint into a fixed position
DERWENT CLASS: B04; P32; P33; S05
INVENTOR: CARTER A J; COTTON N J; HUCKLE J W; SCARBOROUGH N; TALISH R; TALISH R J; WALSH W R
PATENT ASSIGNEE: (EXOG-N) EXOGEN INC
COUNTRY COUNT: 101

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003090868	A1	20031106	(200382)*	EN	35[35]	
AU 2003223711	A1	20031110	(200442)	EN		
EP 1496995	A1	20050119	(200506)	EN		
BR 2003009514	A	20050209	(200516)	PT		
NO 2004005076	A	20041223	(200520)	NO		
KR 2005014811	A	20050207	(200542)	KO		
JP 2005523132	W	20050804	(200552)	JA	36	
CN 1662280	A	20050831	(200607)	ZH		
AU 2003223711	B2	20080131	(200827)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003090868	A1	WO 2003-US12623	20030424
AU 2003223711	A1	AU 2003-223711	20030424
BR 2003009514	A	BR 2003-9514	20030424
CN 1662280	A	CN 2003-814648	20030424
EP 1496995	A1	EP 2003-719910	20030424
JP 2005523132	W	JP 2003-587491	20030424

EP 1496995 A1	WO 2003-US12623 20030424
BR 2003009514 A	WO 2003-US12623 20030424
NO 2004005076 A	WO 2003-US12623 20030424
JP 2005523132 W	WO 2003-US12623 20030424
KR 2005014811 A	KR 2004-717084 20041022
NO 2004005076 A	NO 2004-5076 20041122
AU 2003223711 B2	AU 2003-223711 20030424

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2003223711	A1	Based on	WO 2003090868	A
EP 1496995	A1	Based on	WO 2003090868	A
BR 2003009514	A	Based on	WO 2003090868	A
JP 2005523132	W	Based on	WO 2003090868	A
AU 2003223711	B2	Based on	WO 2003090868	A

PRIORITY APPLN. INFO: US 2002-131784 20020424
AN 2003-903379 [200382] WPIX
CR 1998-446909; 2001-070682
AB WO 2003090868 A1 UPAB: 20060121
NOVELTY - An apparatus comprises a member (m) for covering at least a portion of a joint or an adjacent body member, and securing it into a fixed position. The member comprises at least one area for receiving and holding at least one ultrasonic transducer assembly.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for stimulating growth or healing and for treating pathologies of connective tissue involving covering at least a portion of a joint or an adjacent body member with (m) and securing it into a fixed position; and subjecting the affected connective tissue to noninvasive, low intensity ultrasound.
ACTIVITY - Vulnerary; Antiarthritic; Osteopathic. The anterior cruciate ligament reconstruction was performed in a group of animals using a digital extensor tendon graft. The test animals were then treated with pulsed low intensity ultrasound (1.5 MHz) for 20 minutes per day. The control animals were not provided with any ultrasound treatment. The ultrasound-treated grafts in the test samples showed cellular infiltration of fibrous tissue into the tendon in between the tendon fascicles with neo-angiogenesis/vascularity. The graft was highly cellular and the cells were plump active (matrix producing). The control samples showed no evidence of vascularity, the cells within the graft were necrotic, and the tendon was starting to degenerate.
MECHANISM OF ACTION - None given.
USE - For positioning at least one ultrasonic transducer with respect to a joint for delivery of ultrasonic therapy; for stimulating growth or healing; and for treating pathologies (e.g. tendonitis or tendonosis, tennis elbow, and plantar fascitis) of connective tissue in mammals (e.g. human knee, elbow and/or foot; and supraspinatus tendon of human shoulder) (claimed). Also useful for treating trauma, tissue insufficiency, pain, post-surgical healing, and degenerative conditions (e.g. osteoarthritis).
ADVANTAGE - The apparatus is portable, does not require prolonged treatment times, and is designed for ease of use and positioning of the ultrasonic transducers. The patients are thus more likely to use the technique properly with sufficient benefit. The treatment increases vascularization in the connective tissues, ischemic tissues, or grated tissues.

L12 ANSWER 90 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-874544 [200381] WPIX
CROSS REFERENCE: 2001-183026; 2002-041809; 2002-146856; 2002-194728;

2002-314694; 2002-392206; 2002-634783; 2002-664550;
2002-732029; 2002-739481; 2003-017562; 2003-017568;
2003-017569; 2003-029819; 2003-029820; 2003-074134;
2003-092377; 2003-197428; 2003-201090; 2003-289659;
2003-402804; 2003-421004; 2003-596337; 2003-644582;
2003-767098; 2003-787960; 2003-812284; 2003-813243;
2004-032153; 2004-034500; 2004-034511; 2004-034576;
2004-142680; 2004-168959; 2004-168960; 2004-179698;
2004-356935; 2004-364068; 2004-372849; 2004-389260;
2004-460325; 2004-479776; 2004-615275; 2004-668051;
2004-804251; 2004-833029; 2005-020611; 2005-030751;
2005-030771; 2005-092161; 2005-212401; 2005-563591;
2005-655742; 2005-664195; 2005-683851; 2005-768365;
2006-027358; 2006-028063; 2006-047131; 2006-124852;
2006-190837; 2006-668813; 2007-033471; 2007-150384;
2007-217096; 2007-300748; 2007-360756; 2007-468073;
2007-524508; 2008-K92950; 2008-L84626; 2009-A71920

TITLE: Treating degenerative disc disease, disc herniation or other pathological conditions of the spine comprises using harvested meniscus tissue from a donor

DERWENT CLASS: B04; D16; D22; P32

INVENTOR: FERREE B A

PATENT ASSIGNEE: (FERR-I) FERREE B A

COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
US 20020151981	A1 20021017	(200381)*	EN	4[0]		<--
US 6648919	B2 20031118	(200401)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20020151981	A1 Provisional	US 1999-159488P	19991014
US 20020151981	A1 CIP of	US 2000-688716	20001016
US 20020151981	A1	US 2002-170599	20020613
US 6648919	B2 Provisional	US 1999-159488P	19991014
US 6648919	B2 CIP of	US 2000-688716	20001016
US 6648919	B2	US 2002-170599	20020613

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6648919 B2	CIP of	US 6454804 B

PRIORITY APPLN. INFO: US 2002-170599 20020613
US 1999-159488P 19991014
US 2000-688716 20001016

AN 2003-874544 [200381] WPIX

CR 2001-183026; 2002-041809; 2002-146856; 2002-194728; 2002-314694;
2002-392206; 2002-634783; 2002-664550; 2002-732029; 2002-739481;
2003-017562; 2003-017568; 2003-017569; 2003-029819; 2003-029820;
2003-074134; 2003-092377; 2003-197428; 2003-201090; 2003-289659;
2003-402804; 2003-421004; 2003-596337; 2003-644582; 2003-767098;
2003-787960; 2003-812284; 2003-813243; 2004-032153; 2004-034500;

2004-034511; 2004-034576; 2004-142680; 2004-168959; 2004-168960;
2004-179698; 2004-356935; 2004-364068; 2004-372849; 2004-389260;
2004-460325; 2004-479776; 2004-615275; 2004-668051; 2004-804251;
2004-833029; 2005-020611; 2005-030751; 2005-030771; 2005-092161;
2005-212401; 2005-563591; 2005-655742; 2005-664195; 2005-683851;
2005-768365; 2006-027358; 2006-028063; 2006-047131; 2006-124852;
2006-190837; 2006-668813; 2007-033471; 2007-150384; 2007-217096;
2007-300748; 2007-360756; 2007-468073; 2007-524508; 2008-K92950;
2008-L84626; 2009-A71920

AB US 20020151981 A1 UPAB: 20060203
NOVELTY - Treating degenerative disc disease, disc herniation, or other pathological conditions of the spine comprises: (a) harvesting meniscus tissue from a recently deceased human or other suitable donor; and
(b) placing the harvested meniscus into a patient's spine. ACTIVITY - Neuroprotective; Nootropic; Immunosuppressive; Vulnerary. No biological data is given.
MECHANISM OF ACTION - Transplant therapy.
USE - The method is used to treat degenerative disc disease, disc herniation, or other pathological conditions of the spine (claimed).
ADVANTAGE - The meniscus of the knee is capable of handling the high compression and shear loads placed on the meniscus by the bones of the knee and therefore the mechanical properties of the meniscus make it an ideal tissue to transplant to other areas of the body, including the intervertebral disc.

L12 ANSWER 91 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-830656 [200377] WPIX
CROSS REFERENCE: 2004-020664; 2004-190702; 2005-618204; 2005-618205; 2005-618206; 2005-638459
DOC. NO. CPI: C2003-234033 [200377]
DOC. NO. NON-CPI: N2003-663719 [200377]
TITLE: Sterile composite graft for use in orthopedic surgical procedures comprises two bone blocks defining central through going bore and longitudinal channel cut(s)
DERWENT CLASS: B04; B07; D22; P32
INVENTOR: GERTZMAN A A; STEINER A J
PATENT ASSIGNEE: (GERT-I) GERTZMAN A A; (MUSC-N) MUSCULOSKELETAL TRANSPLANT FOUND; (STEI-I) STEINER A J
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20030171811	A1 20030911	(200377)*	EN	16	[18]
US 6890354	B2 20050510	(200532)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030171811	A1	US 2002-92537	20020308

PRIORITY APPLN. INFO: US 2002-92537 20020308
AN 2003-830656 [200377] WPIX
CR 2004-020664; 2004-190702; 2005-618204; 2005-618205; 2005-618206; 2005-638459

AB US 20030171811 A1 UPAB: 20060120
NOVELTY - A sterile composite graft comprises two bone blocks. Each bone block defines a central through going bore, and longitudinal channel cut(s). The central through going bore has cross-section that allow a ligament replacement to be passed there through. The longitudinal channel cut(s) is parallel to the axis of the central through going bore in the exterior surface of the bone block and a ligament replacement mounted to the bone blocks.
DETAILED DESCRIPTION - A sterile composite graft comprises two bone blocks. Each bone block defines a central through going bore, and longitudinal channel cut(s). The central through going bore has cross-section that allow a ligament replacement to be passed there through. The longitudinal channel cut(s) is parallel to the axis of the central through going bore in the exterior surface of the bone block and a ligament replacement mounted to the bone blocks. The ligament replacement extends through the central bore of the bone blocks and around the two bone blocks in the longitudinal channel. INDEPENDENT CLAIMS are included for: (1) a sterile bone-tendon-bone assembly comprising cylindrical allograft bone block, and recessed path ways tendon replacement mechanism; (2) sterile bone block used in implants comprising arcuate bone block body with central through going bore and parallel channel cut(s);
(3) tendon reconstruction in joint of body comprising coring out a bone tunnel in each bone of joint to form cylindrical bone tunnels, attaching pre-constructed tendon replacement assembly, inserting first cylindrical bone block into one of the bone tunnels, securing the first cylindrical bone block within the bone tunnel, inserting the second cylindrical bone block into a second bone tunnel, and securing the second cylindrical bone block within the second bone tunnel; and (4) ligament reconstruction in joint of body comprising forming bond tunnel in each two bones of the joint, providing two bone blocks, extending ligament replacement(s) between two bone blocks, attaching ligament replacement(s) to the two bone blocks, inserting the first bone block into one bone tunnel, screwing an interference bone fixation screw between wall of bone tunnel and exposed bone portion of the first bone block, inserting the second bone block into second bone tunnel, and screwing an interference bone fixation screw between wall of second bone tunnel and exposed bone portion of the second bone block.
USE - For use in orthopedic surgical procedures.
ADVANTAGE - The invention provides compression strength to the implant bone construct. It provides mechanical strength characteristics of natural bone-tendon-bone to provide overall strength and initial durability to the structure. It provides a pre-machined bone derived structure that can effectively promote new bone growth and accelerates healing. It is design to provide thinner bone block cross sectional diameter. It can be easily handled by physician during surgery, thus eliminating or reducing the physician from carving the respective bone blocks.
DESCRIPTION OF DRAWINGS - The figure shows a perspective view of the tunnel preparation for the bone-tendon-bone assembly. Tibia (22)
Femur (24)

L12 ANSWER 92 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-803795 [200375] WPIX
TITLE: Biomaterial or biomedical device used in bone related implantology and tissue engineering, has surface covered by thin film or monolayer of polyethylene glycol grafted copolymer exhibiting osteogenic properties
DERWENT CLASS: A13; A14; A25; A96; B04; D16; D22; P34
INVENTOR: BOYAN B D; DENZER A J; SCHWARTZ Z D; SIMPSON J P; SPENCER N D; TEXTOR M; TOSATTI S
PATENT ASSIGNEE: (ETHE-C) EIDGENOESSISCHE TECH HOCHSCHULE ZUERICH
COUNTRY COUNT: 98

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 2003072156	A1 20030904	(200375)*	EN	29[2]	
AU 2002233097	A1 20030909	(200428)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003072156	A1	WO 2002-CH125	20020228
AU 2002233097	A1	AU 2002-233097	20020228
AU 2002233097	A1	WO 2002-CH125	20020228

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002233097	A1 Based on	WO 2003072156 A

PRIORITY APPLN. INFO: WO 2002-CH125 20020228

AN 2003-803795 [200375] WPIX

AB WO 2003072156 A1 UPAB: 20100624

NOVELTY - Biomaterial or biomedical device has a surface covered by a thin film or monolayer of a polyethylene glycol (PEG)-grafted copolymer exhibiting osteogenic properties. The surface is defined in an osteoblastic cell culture test as a surface that increases expression of transforming growth factor-betal, prostaglandin E2 and/or mineralization marker osteocalcin by a factor of 2 compared to a corresponding control surface.

DETAILED DESCRIPTION - Biomaterial or biomedical device has a surface covered by a thin film or monolayer of a poly(ethylene glycol)-grafted copolymer exhibiting osteogenic properties. The surface is defined in an osteoblastic cell culture test as a surface that increases the expression of transforming growth factor-betal, the expression of prostaglandin E2 and/or the expression of mineralization marker osteocalcin by at least a factor of 2 in comparison to the corresponding control surface comprising unmodified substrate surface or tissue-culture polystyrene (TCPS). The culture test has references: Martin JY, Schwartz Z, Hummert TW, Schraub DM, Simpson J, Lankford J, Dean DD, Cochran DL, Boyan BD (1995) Effect of titanium surface roughness on proliferation, differentiation, and protein synthesis of human osteoblast-like cells (MG63), J Biomed Mater Res 29:389-401; and Kieswetter K, Schwartz Z, Hummert TW, Cochran DL, Simpson J, Dean DD, Boyan BD (1996) Surface roughness modulates the local production of growth factors and cytokines by osteoblast-like MG63 cells, J Biomed Mater Res 32:55-63.

USE - Use in bone related implantology and tissue engineering. The device is an implant for application within a bone structure or in contact with the bone and is used in dental implantology, maxillofacial surgery, osteosynthesis, spinal surgery or orthopedics. The device to be coated is a scaffold for growing boneous tissue ex vivo or in vivo by tissue engineering. The material to be coated is a bone substitute, e.g. resorbable or non-resorbable calcium phosphates. The scaffold is made from a non resorbable biocompatible material or from a resorbable biocompatible material (all claimed).

ADVANTAGE - The device controls the balance between proliferation, differentiation and maturation of bone-related cells via the composition and architecture of the PEG-grafted copolymer. The application of the PEG-grafted copolymer to the device surface ensures a complete coating of the surface of three-dimensional devices.

L12 ANSWER 93 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-669790 [200363] WPIX
CROSS REFERENCE: 2002-665661
DOC. NO. CPI: C2003-182486 [200363]
DOC. NO. NON-CPI: N2003-534743 [200363]
TITLE: Tissue composition used in treating cartilage degeneration or injury, comprises subendothelial layer, elastica interna, and tunica media of blood vessel harvested from mammal
DERWENT CLASS: B07; D22; P32
INVENTOR: YANG J
PATENT ASSIGNEE: (YANG-I) YANG
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20020183857	A1	20021205	(200363)*	EN	12[1]	<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20020183857	A1 Div Ex	US 2001-755818	20010105
US 20020183857	A1	US 2002-195276	20020715

PRIORITY APPLN. INFO: US 2002-195276 20020715
US 2001-755818 20010105
AN 2003-669790 [200363] WPIX
CR 2002-665661
AB US 20020183857 A1 UPAB: 20050531
NOVELTY - A tissue composition comprises: (a) a subendothelial layer; (b) an elastica interna; and
(c) at least a portion of a tunica media of a blood vessel harvested from a mammal.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) a method of preparing a tissue composition for medical use involves:
(i) providing a blood vessel harvested from a mammal, (ii) removing the endothelial cells, and (iii) removing a portion of the layer of tunica adventitia;
(2) a method of surgically repairing diseased or damaged tissue structures containing first and second tissue structures, involves:
(i) providing a graft construct made from a tissue composition, where the graft construct has first and second ends, (ii) attaching the first end of the graft construct to the first tissue structure, and
(iii) attaching the second end of the graft construct to the second tissue structure;
(3) a method of forming a fluidized tissue composition involves: (i) providing a blood vessel harvested from a mammal, and (ii) forming a protease digest of the blood vessel; and (4) a method of inducing formation of endogenous tissue in a host mammal involves:
(i) providing a fluidized tissue composition comprising a suspension of a blood vessel harvested from a mammal; and (ii) injecting the fluidized tissue composition into the host mammal.

USE - Used in treating cartilage degeneration or injury (e.g. meniscus and intervertebral disk). It also used as tendons or as ligaments. It functions as epithelial, endothelial, nerve or muscular tissue (all claimed). ADVANTAGE - The invention exhibits low immunogenicity and thrombogenicity, high strength, variable absorbability and capable of promoting endogenous tissue growth. DESCRIPTION OF DRAWINGS - The figure is a cross-sectional view of a vascular blood vessel.

L12 ANSWER 94 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-585252 [200355] WPIX
CROSS REFERENCE: 2005-074032
DOC. NO. CPI: C2003-158367 [200355]
TITLE: Composition for rejuvenating skin, treating sun burns and for promoting hair growth, comprises cell growth enhancers, nutrients, extra-cellular matrix proteins, stimulators and penetrations enhancers
DERWENT CLASS: A25; A96; B04; B05; D21; D22
INVENTOR: JAIN D
PATENT ASSIGNEE: (JAIN-I) JAIN D
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20030068297	A1	20030410	(200355)*	EN	13[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030068297	A1 CIP of	US 2001-313306	20010818
US 20030068297	A1 CIP of	US 2001-313307	20010818
US 20030068297	A1 CIP of	US 2001-313313	20010818
US 20030068297	A1 CIP of	US 2001-313314	20010818
US 20030068297	A1	US 2002-222949	20020816

PRIORITY APPLN. INFO: US 2002-222949 20020816
US 2001-313306 20010818
US 2001-313307 20010818
US 2001-313313 20010818
US 2001-313314 20010818

AN 2003-585252 [200355] WPIX
CR 2005-074032
AB US 20030068297 A1 UPAB: 20060120
NOVELTY - Skin rejuvenating composition comprises cell growth enhancers, which increases growth rate of skin cells; nutrients which supports log phase growth of skin cells ; extra-cellular matrix proteins; stimulator to increases extra-cellular matrix protein production; and penetration enhancers, which improves penetration of cell growth enhancers, nutrients, extra-cellular matrix proteins and stimulators.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) method for repairing mammalian skin, which involves permeating the above-mentioned composition into skin; and (2) method for increasing hair growth on scalp, which involves permeating the above mentioned composition to the scalp.
ACTIVITY - Endocrine; Vulnerary; Dermatological. 30 men of 18-40 years old diagnosed with alopecia androgenetica, were assigned to use a composition containing cell growth enhancers, nutrients, extra-cellular matrix proteins,

stimulators and penetration enhancers, at the clipped site for 6 months. After 6 months the increase in weight of hairs at the clipped site when evaluated was 5-25 %, hence concluded that the composition had excellent hair growth promoting effect.
MECHANISM OF ACTION - None given.
USE - For rejuvenating skin by reducing fine lines and wrinkles, treating sun burns or topical abrasions and for promoting hair growth. Also used for coating medical or surgical devices such as sutures, implants, hemostatic plugs, dressings, gauzes and pads (claimed).
ADVANTAGE - The composition effectively repairs and rejuvenates mammalian skin, hence significantly reduces fine lines and wrinkles (to about 10 % or more) on skin and prevents aging of skin. The composition effectively promotes healing of wounds such as sun burns, cuts, scrapes and abrasions; facial peels; and cosmetic surgery procedures. The composition promotes hair growth (from hair follicles by 10 % or more) and prevents alopecia when applied to scalp. The composition having excellent moisturizing effect, improves skin texture and enables to maintain skin in healthy and youthful condition.

L12 ANSWER 95 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-466092 [200344] WPIX
CROSS REFERENCE: 2004-707937; 2010-E02969
TITLE: Biointerface membrane for use in sensor head, analyte measuring device, cell transplantation device and drug delivery device, comprises barrier-cell disruptive domain and cell impermeable domain
DERWENT CLASS: A96; B04; B07; D22; P31; P32; P34; S05
INVENTOR: BRAUKER J; BRAUKER J H; SHULTS M; SHULTS M C; TAPSAK M; TAPSAK M A; BRAUKER H; SHULTS C; TAPSAK A
PATENT ASSIGNEE: (DEXC-N) DEXCOM INC
COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 20030023317	A1	20030130	(200344)*	EN	19[7]		<--
							<--
WO 2003011354	A2	20030213	(200344)	EN			<--
US 6702857	B2	20040309	(200418)	EN			
EP 1414504	A2	20040506	(200430)	EN			
							<--
AU 2002316764	A1	20030217	(200452)	EN			<--
JP 2004538455	W	20041224	(200502)	JA	71		
EP 1414504	B1	20060301	(200617)	EN			
DE 60209498	E	20060427	(200629)	DE			
EP 1656958	A1	20060517	(200634)	EN			
DE 60209498	T2	20060803	(200651)	DE			
ES 2259091	T3	20060916	(200663)	ES			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030023317	A1	US 2001-916386	20010727
AU 2002316764	A1	AU 2002-316764	20020726
DE 60209498	E	DE 2002-609498	20020726
DE 60209498	T2	DE 2002-609498	20020726

EP 1414504 A2	EP 2002-747094 20020726
EP 1414504 B1	EP 2002-747094 20020726
DE 60209498 E	EP 2002-747094 20020726
EP 1656958 A1 Div Ex	EP 2002-747094 20020726
DE 60209498 T2	EP 2002-747094 20020726
WO 2003011354 A2	WO 2002-US23902 20020726
EP 1414504 A2	WO 2002-US23902 20020726
JP 2004538455 W	WO 2002-US23902 20020726
EP 1414504 B1	WO 2002-US23902 20020726
DE 60209498 E	WO 2002-US23902 20020726
DE 60209498 T2	WO 2002-US23902 20020726
JP 2004538455 W	JP 2003-516584 20020726
EP 1656958 A1	EP 2005-111808 20020726
EP 1414504 B1 Related to	EP 2005-111808 20051207
ES 2259091 T3	EP 2002-747094 20020726

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60209498	E	Based on	EP 1414504	A
EP 1656958	A1	Div ex	EP 1414504	A
DE 60209498	T2	Based on	EP 1414504	A
EP 1414504	A2	Based on	WO 2003011354	A
AU 2002316764	A1	Based on	WO 2003011354	A
JP 2004538455	W	Based on	WO 2003011354	A
EP 1414504	B1	Based on	WO 2003011354	A
DE 60209498	E	Based on	WO 2003011354	A
DE 60209498	T2	Based on	WO 2003011354	A
ES 2259091	T3	Based on	EP 1414504	A

PRIORITY APPLN. INFO: US 2001-916386 20010727
AN 2003-466092 [200344] WPIX
CR 2004-707937; 2010-E02969
AB US 20030023317 A1 UPAB: 20060119
NOVELTY - A biointerface membrane for use with implantable device comprises a first domain distal to the implantable device, and a second domain proximal to the device. The first domain supports tissue ingrowth and interferes with barrier-cell layer (41) formation. The second domain is resistant to cellular attachment and is impermeable to cells and cell processes.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an implantable device for measuring an analyte in a biological fluid comprising a housing having electronic circuitry, and sensor head(s) comprising the inventive biointerface membrane and operably connected to the electronic circuit; and (2) a method of monitoring analyte levels comprising implanting the implantable device in a host.
USE - The invention is useful in sensor head, an analyte measuring device, a cell transplantation device, an implantable drug delivery device (e.g. pump, microcapsule or macrocapsule), electrical signal measuring device, and electrical pulse delivering device (claimed). It is useful in the management of transplant patients, diabetic patients, and patients requiring frequent drug treatment.
ADVANTAGE - The invention interferes with the formation of a barrier layer and protects the sensitive regions of the device from host inflammatory response. It allows long term protection of implanted cells or drugs, and continuous information regarding, e.g. glucose levels of a host over extended periods of time. DESCRIPTION OF DRAWINGS - The figure is an illustration of a membrane including a barrier-cell disruptive domain composed of fibers and a cell impermeable domain. Barrier-cell layer (41)

Non-woven fibers (49)

L12 ANSWER 96 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-402834 [200338] WPIX
DOC. NO. CPI: C2003-107100 [200338]
DOC. NO. NON-CPI: N2003-321402 [200338]
TITLE: Implantable composition for filling voids, cosmetically altering the appearance of a patient's face or body, treating internal or topical wounds and increasing the effectiveness of stem cells comprises acellular, pulverized dermis tissue
DERWENT CLASS: A96; B04; B05; D16; D21; D22; P31; P32
INVENTOR: DOAN T; DONDA R A; DONDA R S; JAW R; JAW R Y; RITTER G; SEID C; SEID C A; WIRONEN J F
PATENT ASSIGNEE: (DOAN-I) DOAN T; (DOND-I) DONDA R S; (JAWR-I) JAW R; (REGE-N) REGENERATION TECHNOLOGIES INC; (RITT-I) RITTER G; (SEID-I) SEID C A; (WIRO-I) WIRONEN J F
COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2003017826	A2	20030306	(200338)*	EN	21[0]		<--
US 20030104026	A1	20030605	(200339)	EN			
							<--
AU 2002329884	A1	20030310	(200452)	EN			<--
AU 2002329884	A8	20051013	(200611)	EN			
US 7153518	B2	20061226	(200702)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003017826	A2	WO 2002-US27371	20020827
US 20030104026	A1 Provisional	US 2001-315399P	20010827
US 20030104026	A1 Provisional	US 2001-324399P	20010924
US 20030104026	A1 Provisional	US 2001-345197P	20011029
AU 2002329884	A1	AU 2002-329884	20020827
AU 2002329884	A8	AU 2002-329884	20020827
US 20030104026	A1	US 2002-228558	20020827
US 7153518	B2 Provisional	US 2001-315399P	20010827
US 7153518	B2 Provisional	US 2001-324399P	20010924
US 7153518	B2 Provisional	US 2001-345197P	20011029
US 7153518	B2	US 2002-228558	20020827

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002329884	A1 Based on	WO 2003017826 A
AU 2002329884	A8 Based on	WO 2003017826 A

PRIORITY APPLN. INFO: US 2001-345197P 20011029
US 2001-315399P 20010827
US 2001-324399P 20010924
US 2002-228558 20020827
AN 2003-402834 [200338] WPIX

AB WO 2003017826 A2 UPAB: 20050530
NOVELTY - An implantable composition comprises a mixture of a carrier and acellular, pulverized dermis tissue which is allogenic and/or xenogenic.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a thermoplastic, injectable composition comprising gelatin, acellular pulverized dermis and a growth factor; (2) a method for filling a void in a patient comprising injection of the composition;
(3) a method for cosmetically altering the appearance of a portion of a patient's face or body comprising injection of the composition;
(4) a kit comprising a syringe containing a reconstitution fluid and a syringe containing the novel composition; (5) a composition comprising processed, particulate tissue and a solution comprising at least one glycosaminoglycan;
(6) a kit comprising a container containing processed particulate tissue and a container containing an aqueous carrier solution comprising at least one glycosaminoglycan; (7) a piece of acellular, processed tissue infused with glycosaminoglycans;
(8) a piece of acellular, processed tissue (bone, neural tissue, fibrous connective tissue, cartilage, dura, pericardia, muscle, heart valves, veins, arteries, fascia, dermis, adipose tissue or glandular tissue);
(9) a kit comprising acellular, processed tissue and a container comprising a glycosaminoglycan solution; (10) a method of dressing a wound comprising rehydrating a piece of acellular, processed tissue with glycosaminoglycan solution; (11) a method of treating an internal or topical wound comprising injection or topical application of the composition; (12) a method of treating a wound comprising application of CPE; (13) a composition for treating wounds comprising a mixture of CPE and at least one GAG;
(14) a tissue implant infused with CPE and optionally at least one GAG;
(15) a method of increasing the effectiveness of stem cells upon internal or topical administration comprising combining with a GAG composition;
(16) a composition comprising stem cells in a carrier component (hyaluronic acid and/or chondroitin sulfate); (17) a kit comprising a container comprising freeze-dried, pulverized dermis and a second container comprising a reconstitution fluid (comprising at least one GAG and/or CPE).
USE - The composition is useful for filling voids, cosmetically altering the appearance of a portion of a patient's face or body, dressing wounds, treating internal or topical wounds and increasing the effectiveness of stem cells upon internal or topical administration (claimed).

L12 ANSWER 97 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-401478 [200338] WPIX
DOC. NO. CPI: C2003-106690 [200338]
DOC. NO. NON-CPI: N2003-320171 [200338]
TITLE: Prosthetic implant for repairing/ regenerating tissues, comprises tissue scaffold and fixation device provided with anchoring post extending from surface of scaffold support at selected angle
DERWENT CLASS: A96; D22; P32; P34
INVENTOR: BROWN K R; LI Y; ZIMMERMAN M C
PATENT ASSIGNEE: (ETHI-C) ETHICON INC
COUNTRY COUNT: 30

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
US 20030004578	A1 20030102	(200338)*	EN	12[5]		<-- <--

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AU 2002048942    A   20030102 (200338)  EN                              <--
                                                                        <--
CA 2391697       A1  20021228 (200338)  EN                              <--
                                                                        <--
EP 1277450       A2  20030122 (200338)  EN                              <--
JP 2003102755    A   20030408 (200338)  JA   45
US 6626950       B2  20030930 (200367)  EN
EP 1277450       B1  20050316 (200522)  EN
DE 60203219      E   20050421 (200528)  DE
DE 60203219      T2  20060202 (200612)  DE
AU 784508        B2  20060413 (200674)  EN
JP 4278927       B2  20090617 (200940)  JA   21
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APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030004578 A1		US 2001-893813	20010628
AU 2002048942 A		AU 2002-48942	20020625
AU 784508 B2		AU 2002-48942	20020625
CA 2391697 A1		CA 2002-2391697	20020626
DE 60203219 E		DE 2002-60203219	20020627
DE 60203219 T2		DE 2002-60203219	20020627
EP 1277450 A2		EP 2002-254534	20020627
EP 1277450 B1		EP 2002-254534	20020627
DE 60203219 E		EP 2002-254534	20020627
DE 60203219 T2		EP 2002-254534	20020627
JP 2003102755 A		JP 2002-188498	20020627
JP 4278927 B2		JP 2002-188498	20020627

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60203219	E	Based on	EP 1277450	A
DE 60203219	T2	Based on	EP 1277450	A
JP 4278927	B2	Previous Publ	JP 2003102755	A

PRIORITY APPLN. INFO: US 2001-893813 20010628

AN 2003-401478 [200338] WPIX

AB US 20030004578 A1 UPAB: 20060119

NOVELTY - A prosthetic implant (10) comprises a tissue scaffold (20) and a fixation device (30). The fixation device is provided with a scaffold support (32) and an anchoring post (34) extending from the surface of scaffold support at a selected angle. The anchoring post is insertable into a receptacle formed in tissue and the scaffold support is embedded within the scaffold.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for making/production of the prosthetic implant having tissue scaffold and embedded fixation device, which involves providing a porous ceramic body with a hole; inserting the anchoring post of the fixation device through the hole into the ceramic body, such that the scaffold support contacts the ceramic body forming a first sub-assembly; placing the support scaffold and the ceramic body of the sub-assembly in contact with a polymer solution; permitting a polymer solution to partially infuse into pores in the ceramic body; foaming the polymer solution to produce a polymer foam interlocked with the ceramic body, to form a conjoined composite; and embedding the scaffold support in the resulting conjoined composite.

USE - For repairing/regenerating tissue such as meniscus, fibrocartilages, tendons, ligaments, etc., by cellular proliferation.

ADVANTAGE - The implant containing biodegradable ceramic and polymeric phases enables cellular proliferation with normal morphology and physiology, hence enables tissue repair/ regeneration. The interconnecting pores and channels in the phases facilitates transport of nutrients and/or invasion of cells into the scaffold, and enables in-growth of tissue which closely mimic the function of natural tissues. The polymer phase acts as cushion to dissipate impact energy to shield the brittle ceramic phase from catastrophically damaging stresses. The pores in the phases encourages growth of cells and promotes degeneration of tissues near injured tissue junction. The composite scaffold component facilitates creation of strong bond between different tissues and hence effectively repairs/ regenerates tissues. The scaffold component minimizes collapse of hard tissue and facilitates regeneration of mineralized hard tissues. The implant exhibits excellent strength, physical properties, biocompatibility, is resistant to crumbling during surgery, is resistant to compression and has high porosity. The implant can be effectively sterilized and remodeled.

DESCRIPTION OF DRAWINGS - The figure shows the cross-sectional view of an implant.

prosthetic implant (10)
scaffold (20)
polymeric phase (22)
pores in polymeric and ceramic phases (23,25) ceramic phase (24)
interphase region (26)
fixation device (30)
scaffold support (32)
anchoring post (34)

L12 ANSWER 98 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-313322 [200330] WPIX
DOC. NO. CPI: C2003-082285 [200330]
TITLE: Retinoic acid receptor (RAR) pan-antagonist composition comprising RAR pan-antagonist compounds each of which has high binding affinity to RAR-alpha, RAR-beta and RAR-gamma, useful for increasing chondrogenesis
DERWENT CLASS: B04; D16; D22; P34
INVENTOR: UNDERHILL M T; UNDERHILL T M; WESTON A D
PATENT ASSIGNEE: (UNDE-I) UNDERHILL M T; (UYWO-N) UNIV WESTERN ONTARIO; (WEST-I) WESTON A D
COUNTRY COUNT: 100

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 2003024473	A2 20030327	(200330)*	EN	70[10]		<--
EP 1427399	A2 20040616	(200439)	EN			<--
AU 2002325752	A1 20030401	(200452)	EN			<--
US 20050009868	A1 20050113	(200506)	EN			
AU 2002325752	A8 20051013	(200611)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003024473 A2		WO 2002-CA1421	20020917
US 20050009868 A1	Provisional	US 2001-322874P	20010917
AU 2002325752 A1		AU 2002-325752	20020917

EP 1427399 A2	EP 2002-760008 20020917
EP 1427399 A2	WO 2002-CA1421 20020917
US 20050009868 A1	WO 2002-CA1421 20020917
US 20050009868 A1	US 2004-489750 20040827
AU 2002325752 A8	AU 2002-325752 20020917

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1427399 A2	Based on	WO 2003024473 A
AU 2002325752 A1	Based on	WO 2003024473 A
AU 2002325752 A8	Based on	WO 2003024473 A

PRIORITY APPLN. INFO: US 2001-322874P 20010917
US 2004-489750 20040827

AN 2003-313322 [200330] WPIX

AB WO 2003024473 A2 UPAB: 20050903
NOVELTY - Retinoic acid receptor (RAR) pan-antagonist composition (I) chosen from a mixture of one or more RAR pan-antagonist compounds each of which has high binding affinity to RARalpha, RARbeta and RARgamma, a mixture of at least two compounds that each have high binding affinity to one of RARalpha, RARbeta and RARgamma, and mixture of the two mixtures, is new. (I) is administered to cells to inhibit RAR-mediated signaling and/or enhance RAR-mediated repression.
DETAILED DESCRIPTION - A retinoic acid receptor (RAR) pan-antagonist composition (I) chosen from a mixture of one or more RAR pan-antagonist compounds each of which has a high binding affinity to RARalpha, RARbeta and RARgamma, a mixture of at least two compounds that each have a high binding affinity to one or RARalpha, RARbeta and RARgamma, and a mixture of the above components, where (I) additionally comprises a carrier, and is administered to a population of cells to essentially inhibit RAR-mediated signaling and/or enhance RAR-mediated repression leading to increased chondrogenesis.
INDEPENDENT CLAIMS are also included for: (1) producing cartilage at a cartilage defect in vivo, involves implanting into the defect a population of precursor cells of chondrocyte lineage which have been cultured in the presence of (I); and
(2) an implantable prosthetic device for repairing an orthopedic defect, injury or anomaly in a vertebrate, comprising a prosthetic implant having a surface region implantable adjacent or within a target tissue, and (I) incorporated on and/or within the prosthetic implant.
ACTIVITY - Antiarthritic.
MECHANISM OF ACTION - Promoter of chondrogenesis of precursor cells of chondrocyte lineage (claimed); RAR-alpha, RAR-beta and RAR-gamma pan-antagonist; Cartilage formation stimulator; Blocks and/or enhances RAR-mediated repression of RAR-alpha, RAR-beta and RAR-gamma; Stimulator of Sox9 expression or activity; Activator of p38 mitogen activated protein kinase (MAPK) and protein kinase A (PKA) pathways. To follow endogenous Sox9 activity in primary mesenchymal cells, a reporter-based approach was used in which cells were transiently transfected with pGL3 (4X48), a reporter containing four repeats of a Sox9 binding site from the first intron of Col2a1. The RARalpha-specific antagonist, AGN194301 (301), induced a concentration-dependent increase in reporter activity, whereas at-RA and the RARalpha-specific agonist, AGN193836 (836), attenuated reporter activity. Cells were treated with the RAR pan-antagonist, AGN194310(310), concentrations as low as 10 nM induced Sox9 reporter activity greater than the maximal response elicited by higher doses of 301. The maximal response to the pan antagonist was 530 % induction at 50 nM, whereas the greatest induction of Sox9 reporter activity by the RARalpha-specific antagonist was 280 % at 1 micro-M, a

concentration at which this antagonist affected ligand binding to other RAR subtypes. Similar to RAR antagonism, the reduction in reporter activity caused by pan-agonist such as at-RA (an RAR-alpha agonist) was more pronounced than that induced by the RARalpha-specific agonist, 836. At-RA reduced reporter activity to 53 % at 5 mM, while in response to a much higher dose of 836 (1 micro-M), reporter activity was reduced only to 64 % of control. These results indicated that a loss in activity of all RARs was more efficient at inducing cartilage differentiation than inhibition of the RARalpha subtype alone.
USE - (I) is useful for the manufacture of a medicament for the stimulation of chondrogenesis, and for stimulating chondrogenesis in vivo or in vitro on contact with the precursor cell of chondrocyte lineage. (I) is useful for promoting in vivo integration of an implantable prosthetic device, into a target cartilage tissue of a vertebrate, by providing (I) on a surface of the prosthetic device and implanting the device in a vertebrate at a site, where the target cartilage tissue and surface of the prosthetic device are maintained at least partially in contact for a time sufficient to permit enhanced tissue growth between the target cartilage tissue and the device, and aiding the attachment of implantable prosthesis at cartilageous sites and for maintaining the long term stability of the prostheses in vertebrates by coating selected regions of an implantable prosthesis with (I) and implanting the coated prosthesis into a cartilageous site, where the implantation promotes the formation of new cartilage tissue. (I) is useful for treating, ameliorating or repairing a cartilage-associated degenerative condition (e.g. arthritis, degenerative joint disease), a skeletal defect and/or large segmental skeletal gap and non-union fractures arising from trauma or surgery in a subject. (I) is also useful for ex vivo engineering of chondrocytes, which involves culturing a population of precursor cells of chondrocyte lineage with (I) for a time sufficient to stimulate chondrogenesis, and implanting the cells directly into a desired site in a subject or applying the cells to a device such as implantable mechanical physical device, implantable biodegradable carrier, implantable biodegradable synthetic carrier, implantable prostheses, implantable demineralized allogenic bone or implantable demineralized xenogenic bone, prior to implantation into a subject. (All claimed.) (I) is useful for treating damaged cartilage and associated bone in a subject, stimulating cartilage repair and formation, and producing cartilage at a cartilage defect site in vivo. (I) is also useful for treating orthopedic or dental implants, to enhance or accelerate osseous integration. In orthopedic industry, (I) has the following applications: trauma repair, spinal fusion, reconstructive surgery, maxillofacial surgery, and dental surgery. (I) is useful in skeletal and cartilage reconstruction.
ADVANTAGE - The compositions are effective in treatment of disorders involving abnormal cartilage formation, and associated abnormal skeletal development resulting from disease or trauma. The ability of (I) to stimulate local natural bone growth provides stability and rapid integration, while the body's normal cell-based bone remodeling process slowly resorbs and replaces a selected implant with a natural bone. Use of (I) eliminates the pain and costs associated with the bone harvest procedure required in autograft transplants. (I) can be made synthetically thus reducing the possibility of transmission of infection and disease, as well as diminishing the likelihood of immunological rejection by the patient.

L12 ANSWER 99 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-239464 [200323] WPIX
DOC. NO. CPI: C2003-061560 [200323]
DOC. NO. NON-CPI: N2003-190708 [200323]
TITLE: Vascular graft prosthesis, has outer adventitial material having non-linear elastic response connected to inner tube which allows for cellular in-growth

DERWENT CLASS: A96; D22; F03; P32
INVENTOR: BEZUIDENHOUT D; MILLAM R; YEOMAN M; ZILLA P
PATENT ASSIGNEE: (BEZU-I) BEZUIDENHOUT D; (MEDT-C) MEDTRONIC INC; (MILL-I) MILLAM R; (YEOM-I) YEOMAN M; (ZILL-I) ZILLA P
COUNTRY COUNT: 32

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 2003011184	A2 20030213	(200323)*	EN	51[17]		<--
						<--
US 20030055494	A1 20030320	(200323)	EN			<--
EP 1414369	A2 20040506	(200430)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003011184	A2	WO 2002-US23383	20020723
US 20030055494	A1 Provisional	US 2001-308471P	20010727
EP 1414369	A2	EP 2002-752537	20020723
US 20030055494	A1	US 2002-201498	20020723
EP 1414369	A2	WO 2002-US23383	20020723

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1414369 A2	Based on	WO 2003011184 A

PRIORITY APPLN. INFO: US 2001-308471P 20010727
US 2002-201498 20020723
AN 2003-239464 [200323] WPIX
AB WO 2003011184 A2 UPAB: 20050528
NOVELTY - A vascular graft prosthesis (12) comprises an outer adventitial material (18) connected to the inner tube which allows for cellular in-growth. The adventitial material has a non-linear elastic response property. The prosthesis has a bi-layer wall structure configured to optimize mechanical compliance to a host vessel and an inner material (15) shaped as a tube structure.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) A computer implemented method of designing a vascular graft prosthesis having desired mechanical characteristics which mimic the characteristics of natural vessels, which involves entering parameters of fabric graft material and graft into an encoding processor, implementing several computer implemented optimization algorithms which implement a numerical composite graft model analysis, numerical composite circumferential and longitudinal tensile model analyses on a number of parameters and forming new data generations using the optimization algorithms performing iterations until desired mechanical characteristics are achieved; (2) Manufacture of a vascular graft prosthesis having bi-layer wall structure, which involves forming an inner graft structure of a first material and attaching an adventitial material to inner graft structure;
(3) A system for designing a vascular prosthesis using an inner material and a fabric reinforcing non-linear material; (4) A computer program product for designing a vascular graft prosthesis; and
(5) A method for doing business in which a computer program product aids in the design of a vascular graft prosthesis.

USE - As vascular prosthesis.
ADVANTAGE - The method provides the enhanced self-healing abilities of the composite graft by utilizing the porous structure to promote uninterrupted cellular ingrowth and vascularization of the porous substructure. Utilization of this and related design processes represents a remarkable innovation which allows manufacturing of a vascular graft prosthesis in which an improvement comprises having an adventitial material controlling and interacting with an inner graft structure, the adventitial material is more elastic and less stiff than the inner graft structure material having a non-linear elastic response which mimics the natural vessel of the host. The technical means result in improved patient care and long term graft/ vessel patency, less rejection of implanted grafts and other prostheses and medical devices which are customized to individual patient needs. The business technical methodology has enabled improved quality of care and improved efficiencies and economics are a further consequence.
DESCRIPTION OF DRAWINGS - The figure shows perspective vascular graft prosthesis.
Vascular graft prostheses (12) Graft inner material (15)
Adventitial structure (18)

L12 ANSWER 100 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-093198 [200308] WPIX
CROSS REFERENCE: 2004-022628
DOC. NO. CPI: C2003-023443 [200308]
DOC. NO. NON-CPI: N2003-073843 [200308]
TITLE: Use of a nucleic acid encoding extracellular superoxide dismutase protein or an extracellular superoxide dismutase protein in the preparation of therapeutic composition for treating e.g. restenosis
DERWENT CLASS: B04; B07; D22; P32; P34
INVENTOR: LAHTINEN M; LAUKANEN M; LEPPAENEN O; LEPPANEN O; YLA-HERTTUALA S
PATENT ASSIGNEE: (FITB-N) FIT BIOTECH OY PLC; (XENE-N) XENERATE AB
COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002087610	A1	20021107	(200308)*	EN	85[1]		<--
EP 1385537	A1	20040204	(200410)	EN			<--
AU 2002303052	A1	20021111	(200433)	EN			<--
JP 2004537344	W	20041216	(200482)	JA	133		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002087610	A1	WO 2002-SE848	20020430
AU 2002303052	A1	AU 2002-303052	20020430
EP 1385537	A1	EP 2002-731043	20020430
JP 2004537344	W	JP 2002-584954	20020430
EP 1385537	A1	WO 2002-SE848	20020430
JP 2004537344	W	WO 2002-SE848	20020430

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1385537 A1	Based on	WO 2002087610 A
AU 2002303052 A1	Based on	WO 2002087610 A
JP 2004537344 W	Based on	WO 2002087610 A

PRIORITY APPLN. INFO: FI 2001-898 20010430
AN 2003-093198 [200308] WPIX
CR 2004-022628
AB WO 2002087610 A1 UPAB: 20051109
NOVELTY - In the preparation of a therapeutic composition to be administered systemically to a mammalian, a nucleic acid encoding extracellular superoxide dismutase (EC-SOD) protein and EC-SOD protein is used. Inhibition of hyperplastic connective tissue growth and/or promoting endothelialization in vivo at least partially on a synthetic surface implanted in the mammalian is enabled.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) A medical device with improved biological properties for an at least partial contact with blood, bodily fluids and/or tissues when introduced in a mammalian body, comprising: (a) a core; and
(b) a nucleic acid in a biologically compatible medium. (b) encodes a translation or transcription product capable of leading to production of EC-SOD protein; or
(c) an EC-SOD protein. The protein inhibits hyperplastic connective tissue or fibromuscular formation and/or promotes endothelialization in vivo at least partially on at least one synthetic surface of (a);
(2) Use of the nucleic acid encoding EC-SOD and EC-SOD protein to improve the biological properties of a synthetic surface of the medical device. The nucleic acid and the protein in the biological compatible medium is contacted with the surface in solution or gel form; (3) Improving a mammalian body's biocompatibility with a synthetic surface involving introducing a device comprising at least one synthetic surface in a body with at least partial contact with blood, bodily fluids and/or tissues and administering (b) present in (c) to the surrounding. (b) is administered before, simultaneously or after the introduction of the device in the body; and
(4) A method of producing the medical device involving providing the core comprising at least one surface of a synthetic material and providing (b) in the biological compatible medium. ACTIVITY - Vasotropic; Anticoagulant. MECHANISM OF ACTION - Hyperplastic connective tissue growth inhibitor; Endothelialization promoter. The effect of adenovirus mediated gene transfer of EC-SOD on intimal thickening was evaluated in a rabbit restenosis model. 28 New Zealand white rabbits were kept on 0.25% cholesterol rich diet for two weeks before balloon catheter mediated denudation of aortic endothelium. The animals were anaesthetized with subcutaneous (0.5 ml) Hypnorm (Janssen) and intramuscular (0.8 ml) Dormicum. Three days after the denudation EC-SOD or LacZ (control) adenovirus gene transfer (3x109 pfu/kg) was performed to the abdominal aortic segment. Serum samples were collected before the gene transfer, three and seven days after the gene transfer, and at the end of study. Two weeks or four weeks after the gene transfer the animals were sacrificed. Multiple tissue samples were collected to determine the biodistribution of adenovirus. Gene transfer site and adjacent segments of abdominal aorta from renal arteries to bifurcation point were analyzed histologically to determine the effect of adenoviral EC-SOD gene transfer on neointima formation. Aortic sections were obtained at 3 sites: the segment for gene transfer, a segment 2 cm proximal to, and a segment 2 cm distal from the gene transfer site. After removal of the vessel segments, the specimen were flushed gently with saline and divided into three equal parts. One part was immersion- fixed in 4% paraformaldehyde/15% sucrose (pH 7.4) for 4 hours, rinsed overnight in 15% sucrose (pH 7.4) and embedded in paraffin. Another

part was fixed in 4% paraformaldehyde/15% sucrose (pH 7.4) for 10 minutes, rinsed in PBS, embedded in OCT compound and stored at -70 degrees C until subsequent analysis of gene transfer efficiency by X-gal staining for 6 hours at +37 degrees C (LacZ transfected animals). The third part was snap-frozen and further stored at -70 degrees C until RT-PCR analysis (EC-SOD transfected animals). Neointima formation was quantified after hematoxylin/eosin staining. Antibody CD31 verified with vWF was used for signal detection and apoptosis was detected. SMC accumulation was a common consequence also after balloon angioplasty causing neointima formation within six months after the procedure as given in Bittl JA: Advances in coronary angioplasty N. Engl. J. Med. 1996; 335: 1290-1302. Aortic sections stained with CD31 for endothelial cells showed 86+/-13% recovery of vessel endothelium after denudation in EC-SOD group at two weeks time point whereas in LacZ control group the endothelial recovery was only 21+/-13% showing a significant difference (p is less than 0.001). Immunohistological analysis of factors which could be involved in this effect (eNOS, iNOS, VEGF-A, VEGF-C, and NF-kappaB) showed no difference between EC-SOD and LacZ control groups. The endothelial recovery of the control samples reached EC-SOD group at four weeks time point being 88+/-13% for EC-SOD and 81+/-19% for LacZ control group.

USE - In the manufacture of a medicament for treating conditions (e.g. restenosis, blood vessel thickening) caused by damages due to vascular manipulations in a mammalian body (preferably human body) and for decreasing macrophage accumulation after vascular manipulation and in production of the medical device (e.g. cardiovascular implant, vascular graft, an endovascular implant, stent, stent graft, graft connector, a tissue plant, biosensor) (claimed).

ADVANTAGE - The nucleic acid and the EC-SOD protein enables Inhibition of hyperplastic connective tissue growth and/or promoting endothelialization in vivo at least partially on a synthetic surface implanted in the mammalian. The device has improved biological properties for an at least partial contact with blood, bodily fluids and/or tissues when introduced in a mammalian body. The device improves a mammalian body's biocompatibility. The device is efficient with small-size synthetic vessel sections and intravascular implants that develop connective tissue hyperplasia. The composition enables inhibition of hyperplastic connective tissue growth and/or promotes endothelialization in vivo at least partially on a synthetic surface implanted in the mammalian.

L12 ANSWER 101 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-093094 [200308] WPIX
DOC. NO. CPI: C2003-023340 [200308]
TITLE: Novel isolated human zilla7 proteins, useful for treating or preventing rheumatoid arthritis, psoriasis, septic shock, glomerulonephritis, cerebral ischemia, fracture repair, skin wounds, duodenal ulcers and bone cancers
DERWENT CLASS: B04; D16
INVENTOR: SHEPPARD P O
PATENT ASSIGNEE: (SHEP-I) SHEPPARD P O; (ZYMO-C) ZYMOGENETICS INC
COUNTRY COUNT: 98

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 2002085931	A1 20021031	(200308)*	EN	70[1]		<--
US 20030170205	A1 20030911	(200367)	EN			
EP 1390395	A1 20040225	(200415)	EN			<--
AU 2002256350	A1 20021105	(200433)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002085931 A1		WO 2002-US13041	20020424
US 20030170205 A1	Provisional	US 2001-286481P	20010425
AU 2002256350 A1		AU 2002-256350	20020424
EP 1390395 A1		EP 2002-725805	20020424
US 20030170205 A1		US 2002-132113	20020424
EP 1390395 A1		WO 2002-US13041	20020424

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1390395 A1	Based on	WO 2002085931 A
AU 2002256350 A1	Based on	WO 2002085931 A

PRIORITY APPLN. INFO: US 2001-286481P 20010425
US 2002-132113 20020424

AN 2003-093094 [200308] WPIX

AB WO 2002085931 A1 UPAB: 20050528

NOVELTY - An isolated protein (I) comprising a sequence of amino acid residues 32-166 of a fully defined human zilla7 protein (structural homolog of interleukin-1 and fibroblast growth family of cytokines) sequence (S1) of 252 amino acids as given in the specification, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) an expression vector (II) comprising the operably linked elements of a transcription promoter, a DNA segment encoding (I), and a transcription terminator;

(2) a cultured cell (III) into which has been introduced (II), where the cell expresses the DNA segment; (3) preparation of (I);

(4) a protein (IV) produced according to the above method; (5) an antibody (V) specifically binds to (IV); (6) modulating an immune response in an animal, and modulating the proliferation, differentiation, migration or metabolism of mesencymal cells in an animal, by administering to the animal, a composition comprising (IV) in combination with a vehicle; and (7) modulating the proliferation, differentiation, migration or metabolism of mesencymal cells in culture, by administering a composition comprising (IV) in combination with a vehicle. ACTIVITY - Antirheumatic; Antiarthritic; Osteopathic; Antipsoriatic; Antidiabetic; Antibacterial; Immunosuppressive; Cytostatic; Antiinflammatory; Antiulcer; Nephrotropic; Vasotropic; Vulnerary; Ophthalmological.

MECHANISM OF ACTION - Immune response modulator; Modulator of proliferation, differentiation, migration or metabolism of mesencymal cells (all claimed); Inflammation modulator; IL-1 antagonist; zilla7 antagonist.

No supporting data is given.

USE - (III) is useful for preparing (I) by recombinant techniques (claimed). (I) is used to modulate inflammation and related processes , preferably for reducing inflammation and treating autoimmune diseases by acting as IL-1 antagonist. The zilla7 protein is useful for treating or preventing arthritis (rheumatoid arthritis, osteoarthritis, etc), psoriasis; reducing tissue damage after ischemia; treating septic shock, graft-verse host disease, and leukemia. The zilla7 protein is useful for treating Crohn's disease, ulcerative colitis, insulin-dependent diabetes mellitus, acute pancreatitis, glomerular nephritis, and cerebral ischemia. (I) is also useful in: (i) treatment of full thickness wounds including venous stasis ulcers and other chronic, non-healing wounds; (ii) fracture repair, including non-union fractures; (iii) bone grafts;

(iv) healing bone following radiation-induced osteonecrosis; (v) implants including joint replacements and dental implants;
(vi) repair of bony defects arising from surgery; (vii) treatment of bone defects following therapeutic treatment of bone cancers,
(viii) increasing bone formation during distraction osteogenesis; (ix) treatment of joint injuries, including repair of cartilage and ligament;
(x) repair of joints that have been afflicted with osteoarthritis; (xi) tendon repair and re-attachment; (xii) treatment of osteoporosis and other conditions characterized by increased bone loss or decreased bone formation; (xiii) elevation of peak bone mass in pre-menopausal women; (xiv) use in the healing of connective tissues associated with duramater;
(xv) skin grafting;
(xvi) reconstructive surgery to promote neovascularization and increase skin grafting;
(xvii) reconstructive surgery to promote neovascularization and increase skin flap survival;
(xviii) establishing vascular networks in transplanted cells and tissues;
(xix) treating female reproductive tract disorders, including acute or chronic placental insufficiency (an important factor causing perinatal morbidity and mortality) and prolonged bleeding; (xx) promoting the growth of tissue damaged by periodontal disease and to repair other dental defects; (xxi) promoting the repair of damaged liver tissue; in the acute and chronic lesions of the gastrointestinal tract, including duodenal ulcers;
(xxii) promoting angiogenesis and prevent neuronal degeneration due to chronic cerebral ischemia;
(xxiii) accelerating the formation of collateral blood vessels in ischemic limbs;
(xxiv) promoting vessel repair and development of collateral circulation following myocardial infarction so as to limit ischemic injury;
(xxv) to promoting the repair of damaged cardiovascular tissue; to stimulate hematopoiesis; and (xxvi) enhancing T and B-cell function. The polypeptides are also useful as additives in tissue adhesives for promoting revascularization of the healing tissue. zilla7 protein can be used for promoting production of cartilage, as laboratory reagents, and for producing antibodies. Inhibitors of zilla7 protein (zilla7 antagonists such as anti-zilla7 antibodies are useful in the treatment of ocular neovascularization including diabetic retinopathy and age-related macular degeneration. zilla7 antagonists are useful in the treatment of infantile hemangiomas, which exhibit over-expression of growth factors during the proliferative phase, and to limit the growth or metastasis of tumors. The antibodies are also useful for affinity purification of zilla7 proteins, for immunolocalization within whole animals or tissue sections, in diagnostic assays to determine circulating levels of zilla7 protein, etc.

L12 ANSWER 102 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-046745 [200304] WPIX
DOC. NO. CPI: C2003-011847 [200304]
DOC. NO. NON-CPI: N2003-036892 [200304]
TITLE: Novel biodegradable conductive polymer useful for transplant engraftment, tissue differentiation and tissue regeneration
DERWENT CLASS: A26; A96; B04; B07; D22; P31; P32; P34
INVENTOR: RIVERS T J; SCHMIDT C E
PATENT ASSIGNEE: (RIVE-I) RIVERS T J; (SCHM-I) SCHMIDT C E; (TEXA-C) UNIV TEXAS SYSTEM
COUNTRY COUNT: 95

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002076288	A2	20021003	(200304)*	EN	42[6]		<--
US 20030066987	A1	20030410	(200327)	EN			
US 6696575	B2	20040224	(200415)	EN			
							<--
AU 2002258637	A1	20021008	(200432)	EN			<--
AU 2002258637	A8	20051006	(200610)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002076288	A2	WO 2002-US9514	20020327
US 20030066987	A1 Provisional	US 2001-279019P	20010327
US 6696575	B2 Provisional	US 2001-279019P	20010327
AU 2002258637	A1	AU 2002-258637	20020327
US 20030066987	A1	US 2002-107705	20020327
US 6696575	B2	US 2002-107705	20020327
AU 2002258637	A8	AU 2002-258637	20020327

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002258637	A1 Based on	WO 2002076288 A
AU 2002258637	A8 Based on	WO 2002076288 A

PRIORITY APPLN. INFO: US 2001-279019P 20010327
US 2002-107705 20020327

AN 2003-046745 [200304] WPIX

AB WO 2002076288 A2 UPAB: 20060209

NOVELTY - A biodegradable conductive polymer is new.

DETAILED DESCRIPTION - A biodegradable conductive polymer of formula (1) is new.

n and n' = 0-10;

R1-R4, Z and Z' = H, alkyl, aryl, halogen, hydroxyl, carboxyl or their salts;

X and X' = oxygen or nitrogen atoms that form ester or amido linkages respectively; and

Y and Y' = OH or NH2.

INDEPENDENT CLAIMS are included for the following: (1) A chemical compound used for producing the polymer; (2) Preparation of 2,5-bis-(5-(3-hydroxy-propoxy carbonyl)-2-pyrrolyl)thiophene (HPCPT). 2,5-bis(5-(hydroxycarbonyl)-2-pyrrolyl)thiophene (obtained from 2,5-bis(5-(methoxycarbonyl)-2-pyrrolyl)thiophene obtained by sequential conversion of pyrrole to 2-(trichloroacetyl)pyrrole, 2-(trichloroacetyl)pyrrole to methyl pyrrole-2-carboxylate, methyl pyrrole-2-carboxylate to methyl 5-formylpyrrole-2-carboxylate, methyl 5-formylpyrrole-2-carboxylate to 1,4-bis(5-(methoxycarbonyl)-2-pyrrolyl)- 1,4-butanedione, and 1,4-bis(5-(methoxycarbonyl)-2-pyrrolyl)-1,4- butanedione to 2,5-bis(5-(methoxycarbonyl)-2-pyrrolyl)thiophene) is converted to HPCPT;

(3) Production of biodegradable electrically conductive polymer of formula (8).2,5-bis-(5-(3-hydroxy-propoxy carbonyl)-2-pyrrolyl)thiophene is converted to the polymer by reacting with diacid chloride; and (4) Stimulation of cell response. The polymer contacts one or more cells and applied with electric current and voltage, to stimulate the cells such that the cells are not harmed.

USE - For biodegradable electrically conducting polymer used for tissue engineering such as transplant engraftment, tissue regeneration, tissue repair, tissue reconstruction, tissue growth, tissue differentiation, limb reattachment, limb reconstruction, immunogenic response, and/or cognitive function (claimed).
ADVANTAGE - The biodegradable electrically conductive polymer has processable, and biodegradable and bioactive features. The polymer has beneficial functions such as regenerative, restorative, reconstructive, therapeutic, prophylactic and diagnostic. The scaffolds prepared using the polymer, are bioactive.

L12 ANSWER 103 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-732946 [200279] WPIX
DOC. NO. CPI: C2002-207496 [200279]
DOC. NO. NON-CPI: N2002-577898 [200279]
TITLE: Surgical implant for treatment of hernias comprises mesh comprising strands of predetermined maximum residual mass density
DERWENT CLASS: A96; D22; P31; P32
INVENTOR: BROWNING J
PATENT ASSIGNEE: (BROW-I) BROWNING J; (GYNE-N) GYNE IDEAS LTD; (MPAT-N) MPATHY MEDICAL DEVICES LTD
COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002078568	A1	20021010	(200279)*	EN	75[13]		<--
EP 1372526	A1	20040102	(200409)	EN			
GB 2391177	A	20040204	(200410)	EN			
							<--
AU 2002249353	A1	20021015	(200432)	EN			<--
US 20040172048	A1	20040902	(200458)	EN			
GB 2391177	B	20050126	(200508)	EN			
GB 2406522	A	20050406	(200523)	EN			
GB 2406522	B	20050928	(200564)	EN			
EP 1372526	B1	20060607	(200641)	EN			
DE 60212096	E	20060720	(200652)	DE			
EP 1704832	A2	20060927	(200663)	EN			
DE 60212096	T2	20061221	(200702)	DE			
ES 2266477	T3	20070301	(200719)	ES			
US 7594921	B2	20090929	(200964)	EN			
CA 2450956	C	20100105	(201004)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002078568	A1	WO 2002-GB1234	20020402
AU 2002249353	A1	AU 2002-249353	20020402
DE 60212096	E	DE 2002-60212096	20020402
DE 60212096	T2	DE 2002-60212096	20020402
EP 1372526	A1	EP 2002-718285	20020402
EP 1372526	B1	EP 2002-718285	20020402
DE 60212096	E	EP 2002-718285	20020402
EP 1704832	A2 Div Ex	EP 2002-718285	20020402
DE 60212096	T2	EP 2002-718285	20020402
ES 2266477	T3	EP 2002-718285	20020402

EP 1372526 A1	WO 2002-GB1234 20020402
GB 2391177 A	WO 2002-GB1234 20020402
US 20040172048 A1	WO 2002-GB1234 20020402
GB 2391177 B	WO 2002-GB1234 20020402
EP 1372526 B1	WO 2002-GB1234 20020402
DE 60212096 E	WO 2002-GB1234 20020402
DE 60212096 T2	WO 2002-GB1234 20020402
US 7594921 B2 PCT Application	WO 2002-GB1234 20020402
GB 2391177 B	GB 2003-23766 20020402
GB 2406522 A Div Ex	GB 2003-23766 20020402
GB 2406522 B Div Ex	GB 2003-23766 20020402
GB 2391177 A	GB 2003-23766 20031010
US 20040172048 A1	US 2004-473825 20040426
US 7594921 B2	US 2004-473825 20040426
GB 2406522 A	GB 2004-22719 20041013
GB 2406522 B	GB 2004-22719 20041013
EP 1704832 A2	EP 2006-11679 20020402
CA 2450956 C	CA 2002-2450956 20020402
CA 2450956 C PCT Application	WO 2002-GB1234 20020402

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60212096	E	Based on	EP 1372526	A
EP 1704832	A2	Div ex	EP 1372526	A
DE 60212096	T2	Based on	EP 1372526	A
ES 2266477	T3	Based on	EP 1372526	A
EP 1372526	A1	Based on	WO 2002078568	A
GB 2391177	A	Based on	WO 2002078568	A
AU 2002249353	A1	Based on	WO 2002078568	A
GB 2391177	B	Based on	WO 2002078568	A
EP 1372526	B1	Based on	WO 2002078568	A
DE 60212096	E	Based on	WO 2002078568	A
DE 60212096	T2	Based on	WO 2002078568	A
US 7594921	B2	Based on	WO 2002078569	A
CA 2450956	C	Based on	WO 2002078568	A

PRIORITY APPLN. INFO: GB 2001-8088 20010330
AN 2002-732946 [200279] WPIX
AB WO 2002078568 A1 UPAB: 20091006
NOVELTY - Surgical implant for treatment of hernias comprises a mesh comprising strands having a maximum residual mass density of 50 g/m2.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (a) a minimally invasive method of treating uterovaginal prolapse, which comprises making a 1-2 cm length incision in the vaginal wall close to the opening of the vaginal cavity; making a subcutaneous cut through the incision over and surrounding the area of the prolapse, which cut is parallel to the vaginal wall; and inserting a mesh through the incision into the space defined by the cut;and (b) a surgical tool for delivering a surgical implant subcutaneously through an incision, which is adapted to radially confine the surgical implant during delivery and operable to release the mesh in its intended position.
USE - The surgical implant is used for the treatment of hernias, i.e. inguinal hernia, incisional hernia, or uterovaginal prolapse (claimed).
ADVANTAGE - The inventive implant allows tension free repair of hernias, particularly vaginal prolapse, with minimum pain, allowing the procedure to be performed under local anesthetic in an out patient or office setting.

L12 ANSWER 104 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-713226 [200277] WPIX
DOC. NO. CPI: C2002-202083 [200277]
TITLE: Biocompatible matrix comprising hyaluronic acid and laminin, useful in implants for guiding tissue regeneration, tissue engineering, coating medical devices or scaffolds and as vehicles to support cell growth in vivo
DERWENT CLASS: A96; B04; D16; D22; P32; P34
INVENTOR: NEVO Z; ROCHKIND S; SHAHAR A
PATENT ASSIGNEE: (NEVO-I) NEVO Z; (NVRL-N) NVR LAB INC; (NVRB-N) NVR LABS BVI; (ROCH-I) ROCHKIND S; (SHAH-I) SHAHAR A; (NVRN-N) NVR LABS LTD
COUNTRY COUNT: 97

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002039948	A2	20020523	(200277)*	EN	42[6]		<--
							<--
AU 2002023995	A	20020527	(200277)	EN			<--
EP 1339349	A2	20030903	(200365)	EN			
JP 2004535836	W	20041202	(200479)	JA	65		
US 20050260753	A1	20051124	(200577)	EN			
US 20060024373	A1	20060202	(200610)	EN			
AU 2002223995	B2	20060511	(200681)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002039948	A2	WO 2001-IL1050	20011113
US 20050260753	A1 Provisional	US 2000-248447P	20001114
US 20060024373	A1 Provisional	US 2000-248447P	20001114
EP 1339349	A2	EP 2001-996348	20011113
EP 1339349	A2	WO 2001-IL1050	20011113
JP 2004535836	W	WO 2001-IL1050	20011113
US 20050260753	A1 Cont of	WO 2001-IL1050	20011113
US 20060024373	A1 Cont of	WO 2001-IL1050	20011113
AU 2002023995	A	AU 2002-23995	20011113
JP 2004535836	W	JP 2002-542323	20011113
US 20050260753	A1 CIP of	US 2003-437663	20030513
US 20060024373	A1 CIP of	US 2003-437663	20030513
US 20050260753	A1 Cont of	US 2003-445394	20030523
US 20060024373	A1 Cont of	US 2003-445394	20030523
US 20050260753	A1	US 2003-669476	20030923
US 20060024373	A1 Cont of	US 2003-669476	20030923
US 20060024373	A1	US 2005-223465	20050909
AU 2002223995	B2	AU 2002-223995	20011113

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2002023995	A	Based on	WO 2002039948	A
EP 1339349	A2	Based on	WO 2002039948	A
JP 2004535836	W	Based on	WO 2002039948	A

AU 2002223995 B2 Based on WO 2002039948 A

PRIORITY APPLN. INFO: US 2000-248447P 20001114
WO 2001-IL1050 20011113
US 2003-437663 20030513
US 2003-445394 20030523
US 2003-669476 20030923
US 2005-223465 20050909

AN 2002-713226 [200277] WPIX

AB WO 2002039948 A2 UPAB: 20060202

NOVELTY - A biocompatible matrix (I) comprising hyaluronic acid and laminin cross-linked by an exogenous cross-linking agent to form a combined gel, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a cell culture (II) comprising several cells cultured in or on (I);
(2) an implant (III) comprising (I); (3) an implant (IV) comprising (II); (4) preparing (M1) a biocompatible matrix to be implanted into a human subject comprises:
(a) hydrating hyaluronic acid or salt or hyaluronan; (b) selecting a laminin solution; (c) cross-linking the hydrated hyaluronan and laminin to form a combined gel, and optionally adding bioactive or structural components to the gel;
(5) a kit (V) for carrying out M1, comprises at least one dose of each constituent solution necessary to obtain the gel which forms the biocompatible matrix; and
(6) a medical device (VI) comprising (I) or (II).

USE - (I) is useful for transplanting cells to an individual, by transplanting an implant comprising cells in or on (I). (M1) is useful for preparing a biocompatible matrix to be implanted into a human subject (claimed). (I) is useful in clinical applications including as implants for guided tissue regeneration, tissue engineering, and for coating of medical device or scaffold as well as in biotechnology. (I) serves as vehicle to support cell growth in vivo and as a depot to transport various bioactive high molecular weight substance including growth factors, growth inhibitors, adhesive molecules, adhesion inhibitors and/or small molecular weight drugs. (I) is useful as substrate for supporting cell selection, cell growth, cell propagation or differentiation in vitro as well as in vivo. (I) is useful for sustained release of bioactive components in vivo. (I) is suitable for the culture of cells in a three-dimensional manner at varying cell densities. (I) when coated on a scaffold of a vascular stent or in other application, serve as physical buffer e.g. to prevent damage to the endothelial surface of the blood vessels upon placement of the stent. (I) is used in conjugation with medical devices in the vascular system in general and the cardiovascular system in particular.

ADVANTAGE - (I) has the ability to support cell growth, particularly of cell types for which satisfactory growth is not readily achieved e.g. neural cell types.

L12 ANSWER 105 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-682707 [200273] WPIX
CROSS REFERENCE: 2002-508558; 2002-636627; 2003-689666; 2007-561722; 2008-L67914; 2009-G17775
TITLE: Manufacturing tissue matrix for implantation into a patient, by collecting embryonic stem cells from placenta which has been treated to remove residual cord blood; and seeding stem cells onto or into a tissue matrix
DERWENT CLASS: B04; D22

INVENTOR: HARIRI R J
PATENT ASSIGNEE: (HARI-I) HARIRI R J; (HARI-I) HARIRI R
COUNTRY COUNT: 96

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002063962	A1	20020822	(200273)*	EN	57[4]		<--
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US 20020160510	A1	20021031	(200274)	EN			<--
EP 1367892	A1	20031210	(200382)	EN			
							<--
AU 2002243980	A1	20020828	(200427)	EN			<--
NZ 528035	A	20050729	(200551)	EN			
AU 2002243980	B2	20070823	(200780)	EN			
US 20080131966	A1	20080605	(200838)	EN			
IL 157392	A	20100429	(201034)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002063962	A1	WO 2002-US4187	20020213
US 20020160510	A1 Provisional	US 2001-268560P	20010214
US 20080131966	A1 Provisional	US 2001-268560P	20010214
AU 2002243980	A1	AU 2002-243980	20020213
AU 2002243980	B2	AU 2002-243980	20020213
EP 1367892	A1	EP 2002-709498	20020213
NZ 528035	A	NZ 2002-528035	20020213
US 20020160510	A1	US 2002-74976	20020213
US 20080131966	A1 Cont of	US 2002-74976	20020213
EP 1367892	A1 PCT Application	WO 2002-US4187	20020213
NZ 528035	A PCT Application	WO 2002-US4187	20020213
US 20080131966	A1	US 2007-980012	20071029
IL 157392	A	IL 2002-157392	20020213

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
US 20080131966	A1	Cont of	US 7311904	B
EP 1367892	A1	Based on	WO 2002063962	A
AU 2002243980	A1	Based on	WO 2002063962	A
NZ 528035	A	Based on	WO 2002063962	A
AU 2002243980	B2	Based on	WO 2002063962	A
IL 157392	A	Based on	WO 2002063962	A

PRIORITY APPLN. INFO: US 2001-268560P 20010214
US 2002-74976 20020213
US 2007-980012 20071029

AN 2002-682707 [200273] WPIX

CR 2002-508558; 2002-636627; 2003-689666; 2007-561722; 2008-L67914; 2009-G17775

AB WO 2002063962 A1 UPAB: 20090403
NOVELTY - Method for manufacturing a tissue matrix for implantation into a patient, involves collecting embryonic stem cells (ESC) from a placenta which has been treated to remove residual cord blood; and seeding the collected stem cells onto or into a tissue matrix for implantation into patient.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) a seeded tissue matrix (I) made by the method; (2) an isolated mammalian placenta (II) comprising a mammalian placenta that has been expelled from the body of the mammalian, exsanguinated and perfused with perfusion solution to obtain embryonic-like cells;
(3) method of culturing an isolated mammalian placenta involves obtaining a placenta after expulsion from the uterus, exsanguinating the placenta, and perfusing the placenta to obtain (II); (4) an isolated placental stem cell (III) (embryonic-like stem cell) produced by method (3); and (5) a pharmaceutical composition (V) comprising (III). ACTIVITY - Vulnerary; Cytostatic.
MECHANISM OF ACTION - None given.
USE - For manufacturing a tissue matrix for implantation into a patient. (I) is useful for treating a patient to repair or replace tissue which involves implanting a (I) at a site of the patient's body need of the treatment (claimed). The method is useful in the field of tissue engineering, and is useful for manufacturing a tissue matrix which is useful for regeneration or repair of tissue, bone and other organs. The produced tissue matrix is also used for research purposes. (II) Is useful as a bioreactor to stimulate propagation of embryonic-lime stem cell of a particular lineage, e.g. the cultured placenta can be stimulated to produce embryonic-like stem cell which have become committed to a particular lineage, including adipogenic, chondrogenic, osteogenic, neurogenic, hematopoietic, vasogenic and hepatogenic lineages. (II) Is also useful as a bioreactor for producing bioactive molecules e.g. antibodies, hormones, cytokines, immunoglobulins, and growth factors. (II) Is used as a bioreactor for the cultivation of cells, tissues and organs. The placenta is populated with in particular cell types and used as a bioreactor for ex vivo cultivation of cells, tissues or organs. Such cells, tissue or organ cultures may be harvested and used in transplantation and ex vivo treatment protocols. The placental bioreactor may be used to produce and propagate novel chimeric cells, tissues or organs, and for enhanced growth of a particular cell type, whether native or synthetic in origin. The placenta is preferably used as bioreactor for propagating endogenous cells including pluripotent and/or totipotent embryonic-like stem cells and lymphocytes. (II) Is useful as a rich and abundant source of human placental stem cells, which cells can be used for research, including drug discovery, treatment and prevention of diseases, in particular transplantation surgeries or therapies, and the generation of committed cells, tissues and organoids. (III) Are induced to differentiate for use in transplantation and ex vivo treatment protocols. (III) Are induced to differentiate into a particular cell type and genetically engineered to provide a therapeutic gene product. (III) May be injected into a damaged organ, for organ neogenesis and repair of injury in vivo, where the injury may due to myocardial infarction, stroke, Alzheimer's disease, glaucoma etc. (III) Is also useful in autologous or heterologous enzyme replacement therapy to treat specific diseases such as Tay-Sachs, Niemann-Pick, Fabry's disease etc. The cells may used as autologous or heterologous gene carriers in gene therapy to correct inborn errors of metabolism or to treat cancer, tumors or other pathological conditions. (III) May be used in autologous or heterologous tissue regeneration or replacement therapies for treating corneal epithelial defects, cartilage repair, burn and wound repair for traumatic injuries of the skin etc. The cells may be used to replace or augment existing tissues, to introduce new or altered tissues, or to join together biological tissues or structures. (III) Can be used for augmentation, repair or replacement of cartilage, tendon, or ligaments.
ADVANTAGE - (I) Combines the structural advantages of bioprosthetic grafts with the functional and regenerative capabilities of allografts as well as display attenuated or no immune response, limited propensity to calcify and little stimulation of thromboembolism. DESCRIPTION OF DRAWINGS - The figure

shows a cross-sectional view of the cannulation of the vein and artery of placenta to perfuse the placenta and then collect the perfusate.

L12 ANSWER 106 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-682671 [200273] WPIX
DOC. NO. CPI: C2002-192534 [200273]
DOC. NO. NON-CPI: N2002-539012 [200273]
TITLE: Composition to treat cartilage defects, has biodegradable matrix, preparation of synovial membrane tissue pieces or synovial cells and factor to transform synovial cells into chondrocytes, or synovial covering membrane
DERWENT CLASS: A96; B04; B07; D16; P31; P32; P34
INVENTOR: HUNZIKER E B
PATENT ASSIGNEE: (HUNZ-I) HUNZIKER E B; (ORTH-N) ORTHOGENE INC
COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002060315	A2	20020808	(200273)*	EN	53[0]		<--
							<--
US 20020122790	A1	20020905	(200273)	EN			<--
EP 1377661	A2	20040107	(200404)	EN			
							<--
AU 2002247044	A1	20020812	(200427)	EN			<--
KR 2004008125	A	20040128	(200435)	KO			
CN 1498266	A	20040519	(200455)	ZH			
ZA 2003005762	A	20040929	(200468)	EN	60		
JP 2005500085	W	20050106	(200505)	JA	192		
BR 2002006855	A	20060117	(200608)	PT			
NZ 527916	A	20061027	(200672)	EN			
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AU 2002247044	A2	20020812	(200707)	EN			<--
AU 2002247044	B2	20061116	(200725)	EN			
JP 2007105547	A	20070426	(200730)	JA	28		
AU 2007200495	A1	20070301	(200759)#	EN			
US 20080038314	A1	20080214	(200813)	EN			
US 20080039955	A1	20080214	(200813)	EN			
US 20080089871	A1	20080417	(200829)	EN			
JP 4246994	B2	20090402	(200929)	JA	26		
US 7575743	B2	20090818	(200955)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002060315	A2	WO 2002-US2640	20020130
US 20020122790	A1 Provisional	US 2001-265053P	20010130
US 20020122790	A1 Provisional	US 2001-265064P	20010130
US 20080038314	A1 Provisional	US 2001-265053P	20010130
US 20080038314	A1 Provisional	US 2001-265064P	20010130
US 20080039955	A1 Provisional	US 2001-265053P	20010130
US 20080039955	A1 Provisional	US 2001-265064P	20010130
US 20080089871	A1 Provisional	US 2001-265053P	20010130
US 20080089871	A1 Provisional	US 2001-265064P	20010130

AU 2002247044 A1	AU 2002-247044 20020130
AU 2002247044 A2	AU 2002-247044 20020130
AU 2002247044 B2	AU 2002-247044 20020130
AU 2007200495 A1 Div Ex	AU 2002-247044 20020130
BR 2002006855 A	BR 2002-6855 20020130
CN 1498266 A	CN 2002-805230 20020130
EP 1377661 A2	EP 2002-714799 20020130
JP 2005500085 W	JP 2002-560515 20020130
JP 2007105547 A Div Ex	JP 2002-560515 20020130
JP 4246994 B2	JP 2002-560515 20020130
NZ 527916 A	NZ 2002-527916 20020130
US 20020122790 A1	US 2002-60009 20020130
US 20080038314 A1 Div Ex	US 2002-60009 20020130
US 20080039955 A1 Div Ex	US 2002-60009 20020130
US 20080089871 A1 Div Ex	US 2002-60009 20020130
EP 1377661 A2	WO 2002-US2640 20020130
JP 2005500085 W	WO 2002-US2640 20020130
BR 2002006855 A	WO 2002-US2640 20020130
NZ 527916 A	WO 2002-US2640 20020130
JP 4246994 B2 PCT Application	WO 2002-US2640 20020130
ZA 2003005762 A	ZA 2003-5762 20030725
KR 2004008125 A	KR 2003-710108 20030730
JP 2007105547 A	JP 2007-22498 20070131
AU 2007200495 A1	AU 2007-200495 20070206
US 20080039955 A1	US 2007-974420 20071012
US 20080038314 A1	US 2007-974426 20071012
US 20080089871 A1	US 2007-974456 20071012
US 7575743 B2 Provisional	US 2001-265053P 20010130
US 7575743 B2 Provisional	US 2001-265064P 20010130
US 7575743 B2	US 2002-60009 20020130

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
EP 1377661	A2	Based on	WO 2002060315	A
AU 2002247044	A1	Based on	WO 2002060315	A
JP 2005500085	W	Based on	WO 2002060315	A
BR 2002006855	A	Based on	WO 2002060315	A
NZ 527916	A	Based on	WO 2002060315	A
AU 2002247044	A2	Based on	WO 2002060315	A
AU 2002247044	B2	Based on	WO 2002060315	A
JP 4246994	B2	Previous Publ	JP 2005500085	W
JP 4246994	B2	Based on	WO 2002060315	A

PRIORITY APPLN. INFO: US 2001-265064P 20010130
US 2001-265053P 20010130
US 2002-60009 20020130
AU 2007-200495 20070206
US 2007-974420 20071012
US 2007-974426 20071012
US 2007-974456 20071012

AN 2002-682671 [200273] WPIX

AB WO 2002060315 A2 UPAB: 20090509
NOVELTY - A composition (I) for the treatment of articular cartilage defects, comprising a biodegradable matrix (BM) of matrix-forming material, a preparation of pieces of synovial membrane tissue and an effective amount of a transforming factor (TF) to transform synovial cells in the synovial membrane

tissue into chondrocytes, a synovial covering membrane, or BM, a preparation of synovial cells and TF, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) treating (M1) an articular cartilage defect in an animal, including a human, comprising:
(a) removing a portion of synovial membrane tissue from the animal, and filling the cartilage defect with the synovial membrane tissue;
(b) removing pieces of synovial membrane tissue from the animal, adding to the pieces of synovial membrane tissue an effective amount of TF and filling the articular cartilage defect with TF and the pieces of synovial membrane tissue;
(c) placing a transforming factor-soaked pad adjacent to a synovial membrane of the animal, so that synovial cells within the synovial membrane are transformed into chondrocytes and filling the cartilage defect with the resulting chondrocyte containing tissue;
(d) filling the defect with a therapeutic preparation for repairing the defect and covering the defect with a synovial covering membrane;
(e) filling the defect with autologous synovial membrane tissue and covering the defect with an autologous synovial covering membrane;
(f) removing a portion of the synovial membrane from the animal, obtaining synovial cells from the removed synovial membrane, culturing and proliferating the synovial cells in vitro, optionally stimulating the synovial cells with TF, and filling the cartilage defect with the cultured synovial cells;
(g) removing a portion of the synovial membrane from the animal, obtaining synovial cells from the removed synovial membrane, culturing and proliferating the synovial cells in vitro, implanting the synovial cells in a biodegradable matrix, optionally stimulating the synovial cells with TF, and filling the cartilage defect with the matrix containing cultured synovial cells; or (h) removing a portion of the synovial membrane from the animal, obtaining the individual synovial cells from the removed synovial membrane, culturing and proliferating the synovial cells in vitro, stimulating the synovial cells with TF, stimulating the chondrocytes to produce a cartilage matrix in vitro, and filling the cartilage defect with the resultant cartilage tissue consisting of chondrocytes and their surrounding cartilage matrix; and
(2) anchoring (M2) cells or tissues placed within an articular cartilage defect, by perforating the subchondral bone plate at the base of the defect at multiple points, covering the base of the defect with a membrane, depositing an osteogenic factor and/or an angiogenic factor between the base of the defect and the membrane , depositing superior to the membrane and between the membrane and the plane of the top of the cartilage defect a chondrogenic preparation selected from cell suspension, cells within a matrix, synovial membrane tissue and synovial membrane tissue within a matrix, and covering the defect with a covering membrane.
ACTIVITY - Vulnerary; Osteopathic; Antiarthritic. No biological data is given.
MECHANISM OF ACTION - None given.
USE - The methods and compositions are useful for treating articular cartilage defect in an animal including a human (claimed). The methods are particularly useful in the treatment of articular cartilage defects found in osteoarthritis, and in other diseases and traumas that produce cartilage injury. The compositions are also useful for promoting the healing of traumatic lesions and forms of osteoarthritis. In order to test the effectiveness of using a synovial membrane to cover articular cartilage defects, defects 5 mm wide, 10 mm long and 0.7 mm deep were created with a planing instrument in mature goats. The new defects were filled with a fibrin matrix containing free proliferation agent (insulin-like growth factor, IGF-1) at a concentration of 40 ng/ml and a liposome-encapsulated transforming growth factor (bone morphogenic protein (BMP)-2) at a concentration of 1 microg/ml. The defect was covered with a synovial membrane that was excised from the joint wall, of the same dimensions, and sutured to the defect borders by vycril 7 suture material by using single interrupted sutures. After closure of

the joint the animals were kept with the joint immobilized in a soft cast over 4 weeks (n=6 animals). Following euthanasia and histological analysis, it was found that the synovial membrane was well incorporated into the surrounding cartilage tissue border, and it had also transformed into cartilage-like tissue. In 3 of the animals, the synovial tissue was oriented with the synovial lining cells towards the joint cavity and in 3 of them the lining cells were oriented towards the defect space. In both groups similar results were obtained (i.e. covering membrane orientation does not appear to play a significant role).
ADVANTAGE - Synovial tissue, through transformation into chondrocytes and cartilage, can be adequate to repair shallow defects. The synovial tissue can be completely transformed into chondrocytes and cartilage, and better integrated into adjacent cartilage tissue. The method does not require the presence of attractive factors to induce migration of repair cells into the defect site, and it does not require the complicated extractions and purification procedures necessary to use bone marrow-derived mesenchymal cells. The whole synovial tissue covering membrane is capable of transforming into cartilage tissue and integrated into the newly forming repair cartilage.

L12 ANSWER 107 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-676557 [200273] WPIX
CROSS REFERENCE: 2002-502168; 2003-801616; 2008-N61114
DOC. NO. CPI: C2002-190854 [200273]
DOC. NO. NON-CPI: N2002-534841 [200273]
TITLE: Bio-compatible tissue implant, used for repairing soft tissue injuries, comprises porous bio-absorbable polymeric foam component integrated with bio-compatible mesh-containing reinforcing component
DERWENT CLASS: A11; A14; A28; A32; A96; D22; P32; P34
INVENTOR: BOWMAN S M; BROWN K R; BRUKER I; CHUN I; LI Y; MCALLEN J; MELICAN M C; REZANIA A; SCOPELIANOS A G; SCOPELLIANOS A G; VYAKARNAM M N; MCALLEN III J
PATENT ASSIGNEE: (BROW-I) BROWN K R; (CHUN-I) CHUN I; (ETHI-C) ETHICON INC; (LIYY-I) LI Y; (MCAL-I) MCALLEN J; (MELI-I) MELICAN M C; (REZA-I) REZANIA A; (SCOP-I) SCOPELIANOS A G; (VYAK-I) VYAKARNAM M N
COUNTRY COUNT: 29

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 1216717	A1	20020626	(200273)*	EN	19[7]		<--
AU 2001097396	A	20020627	(200273)	EN			<--
AU 2001097397	A	20020627	(200273)	EN			<--
CA 2365543	A1	20020621	(200273)	EN			<--
US 20020120348	A1	20020829	(200273)	EN			<--
AU 762895	B	20030710	(200355)	EN			
EP 1216717	B1	20080709	(200847)	EN			
DE 60134710	E	20080821	(200857)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

EP 1216717 A1	EP 2001-310810 20011221
US 20020120348 A1	US 2000-747489 20001221
CA 2365543 A1	CA 2001-2365543 20011219
AU 2001097396 A	AU 2001-97396 20011221
AU 2001097397 A	AU 2001-97397 20011221
AU 762895 B	AU 2001-97397 20011221
DE 60134710 E	DE 2001-60134710 20011221
DE 60134710 E	EP 2001-310810 20011221

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 762895	B	Previous Publ	AU 2001097397	A
DE 60134710	E	Based on	EP 1216717	A

PRIORITY APPLN. INFO: US 2000-747489 20001221
US 2000-747488 20001221

AN 2002-676557 [200273] WPIX
CR 2002-502168; 2003-801616; 2008-N61114
AB EP 1216717 A1 UPAB: 20050903
NOVELTY - A bio-compatible tissue implant (10) comprises a bio-absorbable polymeric foam component (12) having pores with open celled structure, and a bio-compatible mesh-containing reinforcing component (14). The foam component is integrated with the reinforcing component such that the pores of the foam component penetrate the mesh of the reinforcing component and interlock with the reinforcing component.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) Production of a reinforced foam, bio-compatible tissue implant, which involves placing the mesh-like reinforcing material in a mold in a desired position and orientation, adding a solution of foam forming polymeric material and suitable solvent to the mold in a controlled manner and lyophilizing the solution to obtain a tissue implant; and
(2) Method of repairing a tissue tear, which involves placing the bio-absorbable implant in a desired position relative to the tissue tear and suturing the implant in the desired position.
USE - For repairing soft tissue injuries, such as damage to pelvic floor and other soft tissue regions, such as cartilages (particular, meniscal, septal, tracheal, etc.), esophagus, skins, bones and vascular tissues.
ADVANTAGE - The bio-absorbable, porous, reinforced tissue engineered implant provides excellent structural support to the damaged tissues and serves as a substrate upon which cells can grow and facilitate rapid healing. The implant has sufficient structural integrity, exhibits sufficient properties which enables them to accept and retain sutures or other fasteners without tearing. The implant has excellent burst strength adequate to reinforce the tissue and encourages tissue in-growth. The implant is utilized in spinal disc, cranial tissue, dura, nerve tissue, liver, pancreas, kidney , bladder, spleen, cardiac muscle, skeletal muscle, tendons, ligaments and breast tissues. DESCRIPTION OF DRAWINGS - The figure shows the sectional view of a tissue implant.
Bio-compatible tissue implant (10) Bio-absorbable polymeric foam component (12) Bio-compatible mesh-containing reinforcing component (14)

L12 ANSWER 108 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-627259 [200267] WPIX
DOC. NO. CPI: C2007-006526 [200703]
TITLE: A co-culture, useful as mammalian transplant tissue, comprises hepatocytes and hepatic stellate

cells formed on a surface which is substantially free of molecules which provide signals to cells in the co-culture
DERWENT CLASS: A23; A96; B04; D16
INVENTOR: BHANDARI R N B; QUIRK R; RICCALTON-BANKS L A; SHAKESHEFF K
PATENT ASSIGNEE: (UYNO-N) UNIV NOTTINGHAM
COUNTRY COUNT: 98

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002048318	A1	20020620	(200267)*	EN	21[3]		<--
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AU 2002022238	A	20020624	(200267)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002048318	A1	WO 2001-GB5566	20011217
AU 2002022238	A	AU 2002-22238	20011217

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2002022238	A	Based on	WO 2002048318 A

PRIORITY APPLN. INFO: GB 2000-30584 20001215
AN 2002-627259 [200267] WPIX
AB WO 2002048318 A1 UPAB: 20050706
NOVELTY - A co-culture (I) comprising hepatocytes and hepatic stellate cells formed on a surface which is substantially free of molecules which provide signals to cells in the co-culture, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) culturing (M1) hepatocytes, by co-culturing the hepatocytes with hepatic stellate cell on a surface which is substantially free of molecules which provide signals to the cells in the co-culture; and
(2) a surface (II) for (I), where (II) is substantially free of molecules which are capable of providing signals to the cells in the co-culture.
USE - (I) is useful in in vitro toxicology testing of substances or metabolism testing of substances, where the substances are drugs or environmental pollutants, as mammalian transplant tissue, preferably human transplant tissue, as a component of engineered liver tissue for implantation into a human, or as a component of a liver-assist device (claimed).
ADVANTAGE - (I) has improved functionality in terms of their ability to metabolize drugs using cytochrome P450 enzymes.

L12 ANSWER 109 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-547383 [200258] WPIX
DOC. NO. CPI: C2002-155131 [200258]
DOC. NO. NON-CPI: N2002-433398 [200258]
TITLE: Biomedical moldings such as ophthalmic moldings for attaching to living tissue e.g. eye, comprises non-biodegradable biocompatible organic polymer comprising surface radicals

DERWENT CLASS: A96; D22; P32; P34
INVENTOR: CHABRECEK P; LEUKEL J; LOHMANN D
PATENT ASSIGNEE: (CHAB-I) CHABRECEK P; (CSIR-C) COMMONWEALTH SCI & IND RES ORG; (LEUK-I) LEUKEL J; (LOHM-I) LOHMANN D; (NOVS-C) NOVARTIS AG; (NOVS-C) NOVARTIS PHARMA GMBH; (NOVS-C) NOVARTIS-ERFINDUNGEN VERW GES MBH
COUNTRY COUNT: 95

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002013881	A1	20020221	(200258)*	EN	50[0]		<--
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AU 2001087679	A	20020225	(200258)	EN			<--
							<--
US 20020022013	A1	20020221	(200258)	EN			<--
US 6555103	B2	20030429	(200331)	EN			
EP 1409035	A1	20040421	(200427)	EN			
JP 2004538034	W	20041224	(200502)	JA	48		
EP 1409035	B1	20070718	(200748)	EN			
DE 60129476	E	20070830	(200761)	DE			
ES 2288986	T3	20080201	(200813)	ES			
DE 60129476	T2	20080320	(200822)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002013881	A1	WO 2001-EP9345	20010813
AU 2001087679	A	AU 2001-87679	20010813
DE 60129476	E	DE 2001-60129476	20010813
EP 1409035	A1	EP 2001-967263	20010813
EP 1409035	B1	EP 2001-967263	20010813
DE 60129476	E	EP 2001-967263	20010813
ES 2288986	T3	EP 2001-967263	20010813
EP 1409035	A1	WO 2001-EP9345	20010813
JP 2004538034	W	WO 2001-EP9345	20010813
EP 1409035	B1	WO 2001-EP9345	20010813
DE 60129476	E	WO 2001-EP9345	20010813
US 20020022013	A1	US 2001-929670	20010814
US 6555103	B2	US 2001-929670	20010814
JP 2004538034	W	JP 2002-519019	20010813
DE 60129476	T2	DE 2001-60129476	20010813
DE 60129476	T2	EP 2001-967263	20010813
DE 60129476	T2	WO 2001-EP9345	20010813

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60129476	E	Based on	EP 1409035	A
ES 2288986	T3	Based on	EP 1409035	A
AU 2001087679	A	Based on	WO 2002013881	A
EP 1409035	A1	Based on	WO 2002013881	A
JP 2004538034	W	Based on	WO 2002013881	A
EP 1409035	B1	Based on	WO 2002013881	A
DE 60129476	E	Based on	WO 2002013881	A
DE 60129476	T2	Based on	EP 1409035	A

DE 60129476 T2 Based on WO 2002013881 A

PRIORITY APPLN. INFO: EP 2000-117520 20000814
AN 2002-547383 [200258] WPIX
AB WO 2002013881 A1 UPAB: 20051109
NOVELTY - A biomedical molding e.g. ophthalmic molding comprises a non-biodegradable biocompatible organic polymer comprising surface radicals.
DETAILED DESCRIPTION - A biomedical molding comprises a non-biodegradable biocompatible organic polymer comprising surface radicals of formula (I).
R1 = hydroxy, 1-4C alkyl, 1-4C alkoxy, sulfo, nitro, trifluoromethyl or halogen;
Z = a group which functions as a triggerable precursor for carbene, nitrene or benzhydrol formation; and is of formula (IIa), (IIb) or (IIc); m = 0-2.
INDEPENDENT CLAIMS are also included for the following: (i) (1) Implantation of corneal onlay onto a cornea which involves providing the onlay comprising surface radical at its anterior surface only, placing the onlay in contact with the corneal tissue and irradiating the onlay. The only is fixed on the cornea; (ii) Use of non-biodegradable biocompatible organic polymer.
USE - Such as ophthalmic molding, particularly corneal only for implanting onto cornea (claimed), particularly for pig eyes and cat eyes, and for contact lenses, intraoccular lenses or artificial cornea. Also useful as wound healing dress material, eye bandage, material for sustained release of active compound such as drug delivery patch, as molding used in surgery particularly for heart valves, vascular grafts, catheters, artificial organs, encapsulated biologic implants e.g. pancreatic islets, material for prosthesis such as bone substitutes or as molding for diagnostic, membranes or biomedical instruments or apparatus.
ADVANTAGE - The modified biological moldings are purified before use by washing or extracting in a suitable solvent. The biomedical molding which is attached chemically or virtually to organic material including living tissue, provides the molding as a valuable tool for surgery. The biomedical moldings provide a new route towards implanting the corneal onlay onto cornea which is easy to perform, does not affect the wearers vision, and is safe. Particularly, a mechanical stable fixation of the implant on the cornea lasts for a period of time sufficient for the epithelial cells to recover, grow over the implant and thus fix it in a persistent manner. The onlays are very easy to handle, since the onlay does not depend on premixing of glue components or time pressure of the surgeon due to specific curing times of the glue components. In addition, no tedious removal of excess glue after fixing the onlay onto the cornea is necessary, and the previous problem of inhibition of overgrowth by flue residues does not exist. The onlays are stored conveniently for a long time, for example in form of a patch with cover foils protecting the surface(s). The onlay is then immediately ready for use, by just removing the cover foil(s) from the surface(s).

L12 ANSWER 110 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-519856 [200255] WPIX
DOC. NO. CPI: C2002-147142 [200255]
DOC. NO. NON-CPI: N2002-411454 [200255]
TITLE: Creation of implantation material from mammalian autogenic, allogenic, or xenogenic tissue having collagen, involves treating the tissue with crosslinking agent having gradual increase in concentration and pH
DERWENT CLASS: D22; P32; P34
INVENTOR: KETHARANATHAN V; KETHARANATHAN J M
PATENT ASSIGNEE: (KETH-I) KETHARANATHAN J M; (KETH-I) KETHARANATHAN V; (KRYO-N) KRYOCOR LTD; (VETT-I) VETTIVETPILLAI K; (CRYO-N)

CRYOCOR PTY LTD
COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002049687	A1	20020627	(200255)*	EN	25[3]		<--
							<--
AU 2002020376	A	20020701	(200264)	EN			<--
EP 1343543	A1	20030917	(200362)	EN			
US 20040030407	A1	20040212	(200412)	EN			
BR 2001016272	A	20040217	(200414)	PT			
CN 1494439	A	20040505	(200447)	ZH			
JP 2004534559	W	20041118	(200476)	JA	39		
US 7022348	B2	20060404	(200624)	EN			
AU 2002220376	B2	20060706	(200707)	EN			
IN 2003DN00969	P1	20070316	(200730)	EN			
CN 100349620	C	20071121	(200831)	ZH			
IN 2008DN06790	P1	20081024	(200903)	EN			
JP 4381680	B2	20091209	(200982)	JA	12		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002049687	A1	WO 2001-AU1619	20011214
BR 2001016272	A	BR 2001-16272	20011214
CN 1494439	A	CN 2001-822740	20011214
CN 100349620	C	CN 2001-822740	20011214
EP 1343543	A1	EP 2001-271083	20011214
EP 1343543	A1 PCT Application	WO 2001-AU1619	20011214
US 20040030407	A1 PCT Application	WO 2001-AU1619	20011214
BR 2001016272	A PCT Application	WO 2001-AU1619	20011214
JP 2004534559	W PCT Application	WO 2001-AU1619	20011214
US 7022348	B2 PCT Application	WO 2001-AU1619	20011214
IN 2003DN00969	P1 PCT Application	WO 2001-AU1619	20011214
IN 2008DN06790	P1 PCT Application	WO 2001-AU1619	20011214
AU 2002020376	A	AU 2002-20376	20011214
AU 2002220376	B2	AU 2002-220376	20011214
JP 2004534559	W	JP 2002-551024	20011214
US 20040030407	A1	US 2003-450577	20030616
US 7022348	B2	US 2003-450577	20030616
IN 2003DN00969	P1	IN 2003-DN969	20030624
IN 2008DN06790	P1 Div Ex	IN 2003-DN969	20030624
IN 2008DN06790	P1	IN 2008-DN6790	20080806
JP 4381680	B2 PCT Application	WO 2001-AU1619	20011214
JP 4381680	B2	JP 2002-551024	20011214

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2002020376	A	Based on	WO 2002049687	A
EP 1343543	A1	Based on	WO 2002049687	A
BR 2001016272	A	Based on	WO 2002049687	A
JP 2004534559	W	Based on	WO 2002049687	A
US 7022348	B2	Based on	WO 2002049687	A
AU 2002220376	B2	Based on	WO 2002049687	A

JP 4381680	B2	Previous Publ	JP 2004534559	W	
JP 4381680	B2	Based on	WO 2002049687	A	

PRIORITY APPLN. INFO: AU 2000-2173 20001220
AN 2002-519856 [200255] WPIX
AB WO 2002049687 A1 UPAB: 20050526
NOVELTY - An implantation material from mammalian autogenic, allogenic, or xenogenic tissue comprising 20-80 weight% collagen, is created by treating the tissue with a cross linking agent for 30 minutes to 6 hours, including varying the cross linking agent concentration from an initial of 0-25% weight/volume to a final of 0.5-5% weight/volume and pH from an initial of 1-3 to a final of 5-8 for a specified time period.
USE - For creating an implantation material (claimed) from mammalian autogenic, allogenic, or xenogenic tissue comprising 20-80 weight% collagen.
ADVANTAGE - The invention produces a material that inhibits in vivo calcification and provides a non-porous biomatrix with an intact microarchitecture which is impervious to angiogenesis and tissue ingrowth and suitable for adhesion and retention of transplanted living cells, e.g. endothelial cells, without the need of additional extracellular matrix protein coating. Flexibility and compliance could be controlled into the biosynthetic or biological material, which is untethered or only tethered at one end to a compressible templated during processing.

L12 ANSWER 111 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER:	2002-519645 [200255] WPIX
DOC. NO. CPI:	C2002-147042 [200255]
DOC. NO. NON-CPI:	N2002-411309 [200255]
TITLE:	Medical prosthetic device or implant e.g. articular inserts comprises metal surface parts coated with a layer of corresponding hydride of the metal containing at least one biomolecule substance
DERWENT CLASS:	B07; D21; D22; P32; P34; P31; P42
INVENTOR:	ELLINGSEN J E; LYNGSTADAAS S P
PATENT ASSIGNEE:	(ASTR-C) ASTRA-TECH AB; (BIOT-N) BIOTI AS; (ELLI-I) ELLINGSEN J E; (ESTE-N) ESTELER SCI & TECHNOLOGY AG; (LYNG-I) LYNGSTADAAS S P; (NUMA-N) NUMAT AS
COUNTRY COUNT:	98

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002045764	A1	20020613	(200255)*	EN	28[0]		<--
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US 20020111694	A1	20020815	(200256)	EN			<--
							<--
AU 2002020955	A	20020618	(200262)	EN			<--
EP 1339437	A1	20030903	(200365)	EN			
BR 2001015849	A	20031014	(200374)	PT			
JP 2004515276	W	20040527	(200435)	JA	48		
CN 1479635	A	20040303	(200436)	ZH			
EP 1339437	B1	20040728	(200452)	EN			
DE 60104560	E	20040902	(200457)	DE			
ES 2223965	T3	20050301	(200519)	ES			
US 20060155384	A1	20060713	(200646)	EN			
CN 1227039	C	20051116	(200661)	ZH			
AU 2002220955	B2	20060615	(200705)	EN			
US 7192445	B2	20070320	(200723)	EN			

US 20070077346 A1 20070405 (200726) EN
JP 2009195731 A 20090903 (200958) JA 21

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002045764 A1		WO 2001-IB2301	20011205
US 20020111694 A1	Provisional	US 2000-254987P	20001212
US 20060155384 A1	Provisional	US 2000-254987P	20001212
US 7192445 B2	Provisional	US 2000-254987P	20001212
US 20070077346 A1	Provisional	US 2000-254987P	20001212
BR 2001015849 A		BR 2001-15849	20011205
CN 1479635 A		CN 2001-820238	20011205
CN 1227039 C		CN 2001-820238	20011205
DE 60104560 E		DE 2001-60104560	20011205
EP 1339437 A1		EP 2001-999228	20011205
EP 1339437 B1		EP 2001-999228	20011205
DE 60104560 E		EP 2001-999228	20011205
ES 2223965 T3		EP 2001-999228	20011205
EP 1339437 A1		WO 2001-IB2301	20011205
BR 2001015849 A		WO 2001-IB2301	20011205
JP 2004515276 W		WO 2001-IB2301	20011205
EP 1339437 B1		WO 2001-IB2301	20011205
DE 60104560 E		WO 2001-IB2301	20011205
US 20020111694 A1		US 2001-10140	20011206
US 20060155384 A1	Cont of	US 2001-10140	20011206
US 7192445 B2		US 2001-10140	20011206
US 20070077346 A1	Div Ex	US 2001-10140	20011206
AU 2002020955 A		AU 2002-20955	20011205
AU 2002220955 B2		AU 2002-220955	20011205
JP 2004515276 W		JP 2002-547546	20011205
US 20060155384 A1		US 2006-344437	20060201
US 20070077346 A1		US 2006-561176	20061117
JP 2009195731 A	Div Ex	JP 2002-547546	20011205
JP 2009195731 A		JP 2009-112412	20090507

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60104560	E	Based on	EP 1339437	A
ES 2223965	T3	Based on	EP 1339437	A
AU 2002020955	A	Based on	WO 2002045764	A
EP 1339437	A1	Based on	WO 2002045764	A
BR 2001015849	A	Based on	WO 2002045764	A
JP 2004515276	W	Based on	WO 2002045764	A
EP 1339437	B1	Based on	WO 2002045764	A
DE 60104560	E	Based on	WO 2002045764	A
AU 2002220955	B2	Based on	WO 2002045764	A

PRIORITY APPLN. INFO: DK 2000-1829 20001206
AN 2002-519645 [200255] WPIX
AB WO 2002045764 A1 UPAB: 20090910
NOVELTY - A medical prosthetic device or implant comprises surface parts formed of metal (A) coated with layer of hydride (B) of the corresponding metal. The layer (B) comprises at least one biomolecule substance (C) associated with it.

DETAILED DESCRIPTION - A medical prosthetic device or implant comprises surface parts formed of metal (A) coated with layer of hydride (B) of the corresponding metal. The layer (B) comprises at least one biomolecule substance (C) associated with it. (A) is selected from titanium, zirconium, tantalum, hafnium, niobium or their alloys or chromium-vanadium alloy and (B) is selected from hydride of titanium, zirconium, tantalum, hafnium, niobium or chromium and/or vanadium, respectively.
An INDEPENDENT CLAIM is included for preparation of the medical prosthetic device or implant by subjecting the surface parts of (A) to an electrolysis treatment to form a layer of (B) in the presence of at least one (C).
USE - In the preparation of medical prosthetic device or implant to replace anatomy or restore functions of the body, such as the femoral hip joint; the femoral head; acetabular cup; elbow including stems, wedges, articular inserts; knee, including the femoral and tibial components, stem, wedges, articular inserts or patellar components; shoulders including stem and head; wrist; ankles; hand; fingers; toes; vertebrae; spinal discs; artificial joints; dental implants; ossiculoplastic implants; middle ear implants including incus, malleus, stapes, incus-stapes, malleus-incus, malleus-incus-stapes; cochlear implants; orthopedic fixation devices such as nails, screws, staples and plates; heart valves; pacemakers; catheters; vessels; space filling implants; implants for retention of hearing aids; implants for external fixation; intrauterine devices (IUDs); and bioelectronic devices such as intracochlear or intracranial electronic devices (all claimed); also useful for e.g. inducing local hard tissue (e.g. bone tissue) formation at the implantation site; controlling microbial growth and/or invasion at the implantation site or systemically; reducing inflammation at the implantation site or systemically; stimulating ligament repair, regeneration or formation; inducing cartilage formation; nucleating, controlling and/or templating biomineralization; improving attachment between implants and tissues; improving osseointegration of implants; improving tissue adherence to an implant; hindering tissue adherence to an (semi-permanent or temporary) implant; improving contact between tissues or tissues and implants, improving tissue sealing of a (surgical) wound; inducing apoptosis (cell death) in unwanted cells (e.g. cancer cells); inducing specific cell differentiation and/or maturation, increasing tissue tensile strength; improving wound healing; speeding up wound healing; templating tissue formation; guiding tissue formation; local gene therapy; stimulating nerve growth; improving vascularization in tissues adjacent to an implant; stimulating local extracellular matrix synthesis; inhibiting local extracellular matrix breakdown; inducing local growth factor release; increasing local tissue metabolism; improving function of a tissue or body-part; and reducing local pain and discomfort.
ADVANTAGE - The devices do not include bifunctional chemical reactants such as formalin or glutaraldehyde for the incorporation of the biomolecules, as in the prior art. Thus exhibit improved bioavailability, such as improved fit, exhibit increased tissue stickiness and increased tissue compatibility; have a biologically active surface for increased cell growth, differentiation and maturation; exhibit reduced immunoreactivity; exhibit antimicrobial activity; exhibit increased biomineralization capabilities; result in improved wound and/or bone healing; lead to improved bone density; have reduced time to load and cause less inflammation. Its is possible to interlock, bin, trap and/or integrate a wide variety of biomolecules in or with a hydride layer during the inorganic process of formation of such a hydride layer on metals by electrolysis.

L12 ANSWER 112 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-425672 [200245] WPIX
DOC. NO. CPI: C2002-120508 [200245]

TITLE: Multilayer biodegradable matrix useful for repairing and generating tissues, comprises two layers, each containing a cross-linked polymeric component selected from a protein and a polysaccharide

DERWENT CLASS: A96; B04; D16; D22; P34; P73

INVENTOR: LIU L S; SPIRO R C

PATENT ASSIGNEE: (ORQU-N) ORQUEST INC; (JOHJ-C) DEPUY ACROMED INC; (JOHJ-C) DEPUY SPINE INC

COUNTRY COUNT: 94

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002017713	A1	20020307	(200245)*	EN	20[1]		<--
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AU 2001083239	A	20020313	(200249)	EN			<--
EP 1320295	A1	20030625	(200341)	EN			
JP 2004507472	W	20040311	(200419)	JA	33		
US 6773723	B1	20040810	(200453)	EN			
US 20040224022	A1	20041111	(200475)	EN			
US 20040224026	A1	20041111	(200475)	EN			
US 20040224027	A1	20041111	(200475)	EN			
NZ 524500	A	20050128	(200513)	EN			
US 6896904	B2	20050524	(200535)	EN			
US 6936276	B2	20050830	(200557)	EN			
US 6939562	B2	20050906	(200558)	EN			
AU 2001283239	B2	20060831	(200708)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002017713	A1	WO 2001-US25017	20010810
US 6773723	B1	US 2000-652604	20000830
US 20040224026	A1 Div Ex	US 2000-652604	20000830
US 20040224027	A1 Div Ex	US 2000-652604	20000830
US 20040224022	A1 Div Ex	US 2000-652604	20000830
US 6896904	B2 Div Ex	US 2000-652604	20000830
US 6936276	B2 Div Ex	US 2000-652604	20000830
US 6939562	B2 Div Ex	US 2000-652604	20000830
AU 2001083239	A	AU 2001-83239	20010810
EP 1320295	A1	EP 2001-962023	20010810
NZ 524500	A	NZ 2001-524500	20010810
EP 1320295	A1	WO 2001-US25017	20010810
JP 2004507472	W	WO 2001-US25017	20010810
NZ 524500	A	WO 2001-US25017	20010810
JP 2004507472	W	JP 2002-522698	20010810
US 20040224026	A1	US 2004-868041	20040614
US 6896904	B2	US 2004-868041	20040614
US 20040224027	A1	US 2004-868043	20040614
US 6939562	B2	US 2004-868043	20040614
US 20040224022	A1	US 2004-868046	20040614
US 6936276	B2	US 2004-868046	20040614
AU 2001283239	B2	AU 2001-283239	20010810

FILING DETAILS:

PATENT NO	KIND	PATENT NO

US 20040224026	A1	Div ex	US 6773723	B
US 20040224027	A1	Div ex	US 6773723	B
US 20040224022	A1	Div ex	US 6773723	B
US 6896904	B2	Div ex	US 6773723	B
US 6936276	B2	Div ex	US 6773723	B
US 6939562	B2	Div ex	US 6773723	B
AU 2001083239	A	Based on	WO 2002017713	A
EP 1320295	A1	Based on	WO 2002017713	A
JP 2004507472	W	Based on	WO 2002017713	A
NZ 524500	A	Based on	WO 2002017713	A
AU 2001283239	B2	Based on	WO 2002017713	A

PRIORITY APPLN. INFO: US 2000-652604 20000830
US 2004-868041 20040614
US 2004-868043 20040614
US 2004-868046 20040614

AN 2002-425672 [200245] WPIX

AB WO 2002017713 A1 UPAB: 20090824

NOVELTY - A multilayer biodegradable matrix comprising two layers, where each layer contains a cross-linked polymeric component selected from a protein or a polysaccharide, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for preparing the matrix comprising applying a first cross-linked polymeric layer to a second cross-linked polymeric layer, where both the polymeric layers contain a polysaccharide or protein cross-linked to another polysaccharide or protein.

ACTIVITY - Osteopathic. Experimental methods are described but no results are given.

MECHANISM OF ACTION - Gene therapy.

USE - The matrix is used for repairing and ~~generating tissues~~ in vivo, at a site of desired ~~tissue regeneration~~ (preferably bone ~~growth~~, cartilage ~~growth~~ or joint repair) (claimed).

L12 ANSWER 113 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 2002-339448 [200237] WPIX

TITLE: ~~Producing~~ decellularized ~~tissue~~ engineered construct (TEC) by decellularizing TEC, and ~~producing~~ decellularized engineered native ~~tissue~~ involves engineering and then decellularizing tissue harvested from human/animal

DERWENT CLASS: A96; B04; D16; D22; P32; P34

INVENTOR: KOH J; MITCHELL S; NIKLASON L; NIKLASON L E; PRABHAKAR V; NIKLASON E

PATENT ASSIGNEE: (KOHJ-I) KOH J; (MITC-I) MITCHELL S; (NIKL-I) NIKLASON L; (PRAB-I) PRABHAKAR V; (UDUK-C) UNIV DUKE

COUNTRY COUNT: 95

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002014480	A2	20020221	(200237)*	EN	89[6]		<-- <--
AU 2001084968	A	20020225	(200245)	EN			<-- <--
US 20020115208	A1	20020822	(200258)	EN			<--
EP 1315796	A2	20030604	(200337)	EN			
US 6962814	B2	20051108	(200573)	EN			

US 20060073590	A1	20060406 (200625)	EN
EP 1315796	B1	20060712 (200652)	EN
DE 60121450	E	20060824 (200657)	DE
DE 60121450	T2	20070215 (200715)	DE
AU 2001284968	B2	20061221 (200729)	EN
US 20080248080	A1	20081009 (200868)	EN

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002014480	A2	WO 2001-US25628	20010816
US 20020115208	A1 Provisional	US 2000-225698P	20000816
US 6962814	B2 Provisional	US 2000-225698P	20000816
US 20060073590	A1 Provisional	US 2000-225698P	20000816
AU 2001284968	B2	AU 2001-284968	20010816
DE 60121450	E	DE 2001-60121450	20010816
DE 60121450	T2	DE 2001-60121450	20010816
EP 1315796	A2	EP 2001-964073	20010816
EP 1315796	B1	EP 2001-964073	20010816
DE 60121450	E	EP 2001-964073	20010816
DE 60121450	T2	EP 2001-964073	20010816
US 20020115208	A1	US 2001-931506	20010816
US 6962814	B2	US 2001-931506	20010816
US 20060073590	A1 Cont of	US 2001-931506	20010816
AU 2001084968	A	AU 2001-84968	20010818
US 20060073590	A1	US 2005-252993	20051019
US 20080248080	A1 Provisional	US 2000-225698P	20000816
US 20080248080	A1 Cont of	US 2001-931506	20010816
EP 1315796	A2 PCT Application	WO 2001-US25628	20010816
EP 1315796	B1 PCT Application	WO 2001-US25628	20010816
DE 60121450	E PCT Application	WO 2001-US25628	20010816
DE 60121450	T2 PCT Application	WO 2001-US25628	20010816
US 20080248080	A1 Div Ex	US 2005-252993	20051019
US 20080248080	A1	US 2008-124521	20080521

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60121450	E	Based on	EP 1315796	A
DE 60121450	T2	Based on	EP 1315796	A
US 20060073590	A1	Cont of	US 6962814	B
AU 2001084968	A	Based on	WO 2002014480	A
EP 1315796	A2	Based on	WO 2002014480	A
EP 1315796	B1	Based on	WO 2002014480	A
DE 60121450	E	Based on	WO 2002014480	A
DE 60121450	T2	Based on	WO 2002014480	A
AU 2001284968	B2	Based on	WO 2002014480	A
US 20080248080	A1	Cont of	US 6962814	B

PRIORITY APPLN. INFO: US 2001-931506 20010816
US 2000-225698P 20000816
US 2005-252993 20051019
US 2008-124521 20080521

AN 2002-339448 [200237] WPIX

AB WO 2002014480 A2 UPAB: 20100107
NOVELTY - Producing (M1) a decellularized tissue engineered construct (TEC) (I) involves providing a TEC, and decellularizing the TEC to form (I), and

producing (M2) decellularized engineered native tissue (II) by procuring tissue harvested from animal or human, and engineering harvested tissue, thereby forming a engineered native tissue which is decellularized to form (II).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) an engineered tissue (III) for use as a tissue engineering scaffold or for implanting into a subject comprising (II); (2) a construct (IV) for use as tissue engineering scaffold or for implanting into a subject comprising (I); and (3) a construct (V) for use in tissue engineering or implanting into a subject comprising a decellularized tissue construct and a population of cells with which the decellularized engineered construct is seeded with the population of cells.

USE - The method is useful for producing a decellularized TEC and a decellularized engineered native tissue. (M1) is useful for treating a subject suffering from tissue damage or loss, where (I) is produced and then implanted into a subject. The implanting step involves supplementing or replacing a blood vessel of the subject or tissue of the subject such as heart valve, muscle, joint, ligament, tendon, bone or organ. (M1) is also useful for producing an engineered construct, where the decellularized TEC is contacted with cells capable of adhering to it, thereby forming a cell-seeded decellularized construct and maintaining the cell-seeded decellularized construct for a growth period in an environment suitable for growth of cells to form an engineered construct.

The TEC is produced by contacting first population of human or genetically transformed cells with a substrate to form primary cell-seeded construct, maintaining cell-seeded construct to allow growth of first population of cells to form primary TEC that is contacted with second population of cells to form secondary cell-seeded construct. The secondary cell -seeded construct is maintained under conditions suitable for growth or second population of cells. The human cells e.g., smooth muscle cells, cardiac cells, epithelial cells, endothelial cells, urothelial cells, fibroblasts, myoblasts, chondrocytes, chondroblasts, osteoblasts, osteoclasts, hepatocytes, bile duct cells, pancreatic islet cells, thyroid, parathyroid, adrenal, hypothalamic, pituitary, ovarian, testicular, salivary gland cells, adipocytes, or precursor cells are obtained by harvesting cells from subject who is the intended recipient of the TEC. Preferably, the population of cells comprise at least two different cell types.

The engineered construct produced using (M1) is useful for treating a subject suffering from tissue damage or loss, where the produced tissue engineered construct is implanted into a subject as described above. The cells which are contacted with the decellularized construct to form cell -seeded decellularized construct, are obtained by harvesting cells from a subject and culturing the cells in vitro prior to seeding the decellularized construct. Before the implanting step, the engineered decellularized construct is treated with biologically active agent (e.g., growth factors, adhesion factors, soluble extracellular matrix proteins, thrombomodulators, antibiotics or agents that augment hemocompatibilty), whereby the construct serves as a vehicle for the delivery of the biologically active agent to the subject. The biologically active agent enhances recellularization or vascularization of the construct after the implanting step. (III), (IV) or (V) is useful for treating a subject suffering from tissue damage or loss. Before implantation (III), (IV) or (V) is treated with biologically active agent as described above, such that the construct or engineered tissue serves as a vehicle for delivery of the biologically active agent to the subject (all claimed).

ADVANTAGE - The availability of decellularized and mechanically robust collagenous scaffolds dramatically shortens the production time for an cell-based implantable tissue.

DESCRIPTION OF DRAWINGS - The figure shows a bioreactor including a tubular substrate for growth of a tissue engineered construct.

L12 ANSWER 114 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-303050 [200234] WPIX
DOC. NO. CPI: C2002-088145 [200234]
DOC. NO. NON-CPI: N2002-237062 [200234]
TITLE: Device useful for corneal augmentation or replacement to improve vision comprises an optical polymer, biocompatible, linear, single chain tethers and a corneal enhancer
DERWENT CLASS: A96; B04; B07; D22; P32
INVENTOR: BI J; JACOB J T
PATENT ASSIGNEE: (BIJJ-I) BI J; (JACO-I) JACOB J T; (LOUU-C) UNIV LOUISIANA STATE & AGRIC & MECH COLL
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 20020007217	A1	20020117	(200234)*	EN	13[0]		<--
US 6689165	B2	20040210	(200413)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20020007217	A1 Provisional	US 2000-193528P	20000331
US 20020007217	A1	US 2001-822582	20010330

PRIORITY APPLN. INFO: US 2001-822582 20010330
US 2000-193528P 20000331

AN 2002-303050 [200234] WPIX
AB US 20020007217 A1 UPAB: 20060119
NOVELTY - A device comprises an optical polymer; biocompatible, linear, single chain tethers having a molecular weight of about 2000 - 8000 (preferably 3400); and a corneal enhancer to enhance corneal epithelial cells adhesion and migration. One end of each tether is linked to the surface of the polymer and the other end is linked to the corneal enhancer.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for corneal augmentation or replacement to improve vision involving implanting the device in the eye.
USE - As a corneal onlay, an epikeratophakia lenticule, an intracorneal augmentation or an artificial cornea for corneal augmentation or replacement to improve vision (claimed).
ADVANTAGE - The device enhances and maintains a surface of corneal epithelial cells and mimics the surface topography of the top layer of Bowman's membrane, thus improves the vision. The tethers allow the corneal enhancer to maintain its active conformation state when linked to the polymer surface. The enhancer enhances the growth rate of corneal epithelial cells over the growth rate over a device that lacks the tethers and the corneal enhancer. The combination of the enhancer and the tethers creates a more natural environment. The device allows epithelial cells to spread and attach faster than the existing systems as well as providing an underlying textured surface that allows the cells to resist the shear force induced in vivo by the blinking of the eyelid. The resulting epithelial layer closely resembles a natural epithelial layer.

L12 ANSWER 115 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 2002-280150 [200232] WPIX
DOC. NO. CPI: C2002-082355 [200232]
TITLE: Novel non-contracting, hydrophilic and translucent tissue equivalent useful as transplant material, comprises substantially dimensionally stable collagenous matrix, and mesenchymal cells retained within matrix
DERWENT CLASS: B04; D16; D22
INVENTOR: DIMITRIJEVICH S D; GRACY R W
PATENT ASSIGNEE: (DIMI-I) DIMITRIJEVICH S D; (GRAC-I) GRACY R W; (UYNT-N) UNIV NORTH TEXAS HEALTH SCI CENT
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
US 20020028192	A1 20020307	(200232)*	EN	47[25]		<--
						<--
US 6471958	B2 20021029	(200274)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20020028192	A1 CIP of	US 1998-46755	19980324
US 20020028192	A1	US 2001-775843	20010201

PRIORITY APPLN. INFO: US 2001-775843 20010201
US 1998-46755 19980324

AN 2002-280150 [200232] WPIX
AB US 20020028192 A1 UPAB: 20060119
NOVELTY - A substantially non-contracting, hydrophilic and translucent tissue equivalent (I) which comprises a substantially dimensionally stable collagenous matrix and mesenchymal cells retained within the matrix, where the collagenous matrix is free from covalent crosslinks and dissociated by mild treatment with collagenase, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for making (M) an tissue equivalent involving combining an aqueous suspension of mesenchymal cells in a substantially serum-free nutrient medium at a temperature below ambient temperature with a solution of a collagenous material to produce a gelable admixture, and solidifying the admixture by gelation at a pH of about 7 and a temperature of about 37 degrees Centigrade to a translucent matrix.
USE - (I) is useful for a variety of complete tissue replacements including skin and cornea, for the study of fundamental mechanisms and therapeutic approaches in wound healing, for supporting the growth and differentiation of various epithelial and endothelial cells, as a transplant material, for screening, testing and evaluating potential drugs and consumer products, as an implantable source of exogenous substances, such as substances used to facilitate processes such as wound healing, for studies of effects of drugs, cosmetics and other pharmaceutical agents, for production of biocompatible clinical products for tissue replacement and augmentation, and for research studies on fundamental aspects of tissue structure and function.
ADVANTAGE - (I) more closely resembles normal tissues than conventional tissue equivalents, and supports growth and differentiation of epithelial cells as well as the growth of endothelial cells. Both the epithelial and endothelial surfaces produced on (I) display characteristic histological features of normal tissues. (I) is hydrophilic and translucent, permitting the visual observation of the cellular components by transmitted light and fluorescence

microscopy. Cellular viability, cell motility, as well as cellular growth and differentiation can be directly observed. Thus, quantitative evaluation of the status of cells (I) can be conveniently and rapidly assessed by either manual or automated methods. (I) remains substantially hydrated, and thus maintains a greater permeability to exogenous material such as nutrients or drugs, in contrast to contracting tissue equivalents that lose water, resulting in the condensation of the matrix, equivalent to the formation of scar. The greater natural permeability of (I) provides a more realistic system to study the processes of tissue contraction and consequence scarring. (I), when used as a support for epithelial cells, supports cellular differentiation without the use of exogenous agents, such as retinoic acid. (I) when used as transplant material, is robust enough to survive manual manipulation. The translucence of (I) facilitates types of monitoring that support spectroscopic analyses. (I) is also ideal for other minimally invasive methods, such as studies of metabolic processes using nuclear magnetic resonance (NMR) spectroscopy and metabolic substrates labeled with paramagnetic stable isotopes.

L12 ANSWER 116 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-230278 [200229] WPIX
DOC. NO. CPI: C2002-070007 [200229]
TITLE: Producing a scaffold for use in tissue engineering including tissue repair and cell transplantation, comprises electrostatically depositing particles of biocompatible materials onto a substrate where the particles interlink
DERWENT CLASS: B04; D16
INVENTOR: MASON C
PATENT ASSIGNEE: (MASO-I) MASON C
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
GB 2360789	A	20011003	(200229)*	EN	62[1]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
GB 2360789	A	GB 2000-7756	20000330

PRIORITY APPLN. INFO: GB 2000-7756 20000330
AN 2002-230278 [200229] WPIX
AB GB 2360789 A UPAB: 20050525
NOVELTY - Producing (I) a scaffold (II) suitable for biomedical application, comprises electrostatically depositing particles of one or more biocompatible material onto a substrate where the particles interlink.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) promoting cell growth comprising depositing desiccated cells onto a substrate, where the cells interlink, and promoting growth of the cells by rehydration; and (2) a scaffold (II) suitable for biomedical application which comprises one or more implants.
ACTIVITY - Vulnerary; Cytostatic.
MECHANISM OF ACTION - Growth and differentiation of tissue or organs promoter. No biological data is given.
USE - (I) is useful for producing a scaffold suitable for biomedical application. (II) is useful for promoting cell growth (claimed). (I) and (II)

are suitable for biomedical applications, which apply to the field of tissue engineering, in particular in the field of repair, regeneration or replacement of tissues and organs. Scaffold implanted into the host as a synthetic blood vessel or flat sheet of collagen impregnated, for e.g. with CuSO4/vitamin C, is useful for treating burns. (II) is useful for promoting growth of damaged tissue within the host, e.g. nerve tissue, acting as a scaffold bandage in traumatic nerve repair, and promotes the growth of other tissues, for e.g. skin over a wound or ulcer, or in the repair of cartilage or bone. The scaffold is useful for promoting the growth and differentiation of tissue or organs for subsequent implantation, for tissue engineering, part of or whole organs, such as liver, pancreas, bladder, cardiac muscle and cardiac valves, in the field of gene transduction, for delivering virus, modified virus particles, DNA, liposome coated DNA, to cells, and in pharmacology, in the area of cell cultures and tissue cultures to test drugs or other chemicals for toxic, physiological, biological, chemical, biochemical, pharmacological, and mechanical properties in pre-clinical studies. Specific areas include studying the aging process, repair mechanisms, cancer growth and treatment, blood clotting and radiation interaction. Further uses of (II) include, analysis of the effects of man-made substances, for e.g. metal in prosthetic hip joints on tissue and cells in vitro and vice versa, assessing the intrinsic properties of scaffold materials, for e.g. collagen sheets for hemostatic control, and as biosensors for e.g. by attaching enzymes, DNA and/or proteins to the scaffolds to measure a specific variable.
ADVANTAGE - The scaffold is biodegradable and hence prevents the risk of infection and undesirable biological responses. The scaffold applied to a medical device increases biological acceptability or protects the medical device from adverse effects. The electrostatic deposition allows the bioactive agents to be selectively distributed between the scaffold to provide a constant rate or pulse controlled release of the bioactive agent and/or form a concentration gradient within the scaffold, and allows a mixture of particle types to be applied to a substance. The scaffold or tissue including the implant facilitates monitoring of conditions/function of organ/cells and/or host, and tracking of organs during transit or once implanted in patients. Tissue engineering avoids the need for whole organ transplantation.

L12 ANSWER 117 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-195903 [200225] WPIX
DOC. NO. CPI: C2002-060593 [200225]
DOC. NO. NON-CPI: N2002-148801 [200225]
TITLE: Recombinant production of materials, useful e.g. for preparing autologous transplants, by transforming cells, then cloning and implanting them in a recipient
DERWENT CLASS: B04; D16; P14
INVENTOR: BREM G; BREM G A G
PATENT ASSIGNEE: (APOG-N) APOGENE GMBH & CO KG
COUNTRY COUNT: 87

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002009507	A1	20020207	(200225)*	DE	30[0]		<--
							<--
AU 2000065672	A	20020213	(200238)	EN			<--
EP 1303183	A1	20030423	(200329)	DE			
JP 2004518405	W	20040624	(200442)	JA	41		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002009507 A1		WO 2000-EP7239	20000727
AU 2000065672 A		AU 2000-65672	20000727
EP 1303183 A1		EP 2000-953104	20000727
AU 2000065672 A		WO 2000-EP7239	20000727
EP 1303183 A1		WO 2000-EP7239	20000727
JP 2004518405 W		WO 2000-EP7239	20000727
JP 2004518405 W		JP 2002-515074	20000727

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000065672 A	Based on	WO 2002009507 A
EP 1303183 A1	Based on	WO 2002009507 A
JP 2004518405 W	Based on	WO 2002009507 A

PRIORITY APPLN. INFO: WO 2000-EP7239 20000727
AN 2002-195903 [200225] WPIX
AB WO 2002009507 A1 UPAB: 20050525
NOVELTY - Recombinant production of materials (A), comprising transforming cells with (A)-encoding nucleic acid (I), cloning the transformed cells, and introducing the cloned cells into a recipient organism, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for producing cells, tissues or organs in animals, comprising:
(a) isolating cells (B) from an individual; (b) implanting them into an immune-incompetent recipient animal;
(c) growing the animal;
(d) isolating (B) that are growing in the recipient and introducing these into an individual.
USE - The method is used to produce recombinant proteins, cells, tissues or organs, originally from a first individual, in an animal host, particularly for subsequent isolation and return to the first individual, especially for preparation of autologous human transplants.
ADVANTAGE - The method allows a previously prepared recipient organism to be provided very quickly with (I)-expressing cells (contrast up to 5 years required to produce a mature animal by germ line cell transfer), resulting in a production system quickly, efficiently and inexpensively. Typically, a recipient organism can be transformed with a new construct and expression clones made available in 2 months. The method should overcome the shortage of donor organs for transplantation. Cells from the cloning process survive longer than normal cells (up to 150 divisions), and may express (I) over the lifetime of the host animal.

L12 ANSWER 118 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-155107 [200220] WPIX
CROSS REFERENCE: 1995-240363; 2001-476303; 2002-010224; 2003-090596; 2004-167549; 2006-018294; 2008-B77289
DOC. NO. NON-CPI: N2002-117885 [200220]
TITLE: Dental implant having a dual bio-affinity collar, has proximal and distal segments including surface texture adapted for promotion of osseo-integration of surrounding cortical bone
DERWENT CLASS: P32
INVENTOR: ALEXANDER H; HOLLANDER B L; KOZAK I; KOZAK I K; NAIMAN C;

RICCI J
PATENT ASSIGNEE: (BIOL-N) BIOLOK INT INC
COUNTRY COUNT: 48

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2002007634	A2	20020131	(200220)*	EN	18[4]		<--
							<--
AU 2002015305	A	20020205	(200236)	EN			<--
							<--
US 6454569	B1	20020924	(200266)	EN			<--
							<--
EP 1296612	A2	20030402	(200325)	EN			<--
KR 2003036244	A	20030509	(200358)	KO			
AU 2002215305	B2	20070308	(200758)	EN			
KR 673676	B1	20070123	(200820)	KO			
CA 2414671	C	20090224	(200917)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002007634	A2	WO 2001-US19550	20010619
US 6454569	B1 Cont of	US 1993-146790	19931102
US 6454569	B1 Cont of	US 1995-390805	19950215
US 6454569	B1 CIP of	US 1996-639712	19960429
US 6454569	B1 CIP of	US 1997-996244	19971222
US 6454569	B1 CIP of	US 2000-500038	20000208
US 6454569	B1	US 2000-605142	20000626
EP 1296612	A2	EP 2001-983914	20010619
EP 1296612	A2	WO 2001-US19550	20010619
KR 673676	B1	WO 2001-US19550	20010619
AU 2002015305	A	AU 2002-15305	20010619
AU 2002215305	B2	AU 2002-215305	20010619
KR 2003036244	A	KR 2002-717670	20021226
KR 673676	B1	KR 2002-717670	20021226
CA 2414671	C	CA 2001-2414671	20010619
CA 2414671	C PCT Application	WO 2001-US19550	20010619

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
KR 673676	B1	Previous Publ	KR 2003036244	A
AU 2002015305	A	Based on	WO 2002007634	A
EP 1296612	A2	Based on	WO 2002007634	A
AU 2002215305	B2	Based on	WO 2002007634	A
KR 673676	B1	Based on	WO 2002007634	A
CA 2414671	C	Based on	WO 2002007634	A

PRIORITY APPLN. INFO: US 2000-605142 20000626
US 1993-146790 19931102
US 1995-390805 19950215
US 1996-639712 19960429
US 1997-996244 19971222
US 2000-500038 20000208
AN 2002-155107 [200220] WPIX

CR 1995-240363; 2001-476303; 2002-010224; 2003-090596; 2004-167549; 2006-018294; 2008-B77289

AB WO 2002007634 A2 UPAB: 20060202

NOVELTY - The implant comprises a solid elongated body with a proximal end including a collar which in turn has a proximal and distal segment, with the proximal segment including a surface texture adapted for the promotion of tissue growth and in which the distal segment includes a surface texture adapted for the promotion of osseo-integration of surrounding pref. cortical bone.

USE - Used for dental implants, especially implants intended for insertion into the mandible, maxilla and facial bones, the same including the maxillofacial area, in the healing process.

ADVANTAGE - Has a collar portion consisting of proximal and distal cylindrical sub-segments, one having a surface effect adapted for the promotion of growth of soft tissue into it, and the other adapted for the promotion of bone or hard tissue growth into it, pref. at a cortical surface of the bone. Provides microgeometric surfaces which alter the growth behaviour of colonies of cells attached to it, in order to preclude the cupping effect between an implant and an osseotomy site. DESCRIPTION OF DRAWINGS - The drawing is an enlarged view of the upper left hand corner of the implant, showing the area of tissue to cortical bone to implant collar interface.

L12 ANSWER 119 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER:	2002-147460 [200219] WPIX
DOC. NO. CPI:	C2002-045635 [200219]
DOC. NO. NON-CPI:	N2002-111844 [200219]
TITLE:	Generation of tissue graft for treating connective tissues such as skin, cartilage, involves implanting biocompatible scaffold, for associating cells of target tissues with scaffold, and removing the tissue graft
DERWENT CLASS:	A96; D22; P32; P34
INVENTOR:	ANDERSON M; GOODSHIP A E; HUCKLE J; HUCKLE J W; SHASTRI V R
PATENT ASSIGNEE:	(ANDE-I) ANDERSON M; (GOOD-I) GOODSHIP A E; (HUCK-I) HUCKLE J W; (MASI-C) MASSACHUSETTS INST TECHNOLOGY; (SHAS-I) SHASTRI V R; (SMIN-C) SMITH & NEPHEW INC
COUNTRY COUNT:	93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001085226	A1	20011115	(200219)*	EN	34[2]		<--
							<--
AU 2001059702	A	20011120	(200219)	EN			<--
							<--
EP 1282452	A1	20030212	(200312)	EN			<--
US 20040010320	A1	20040115	(200406)	EN			
US 7108721	B2	20060919	(200662)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001085226	A1	WO 2001-US15070	20010510
AU 2001059702	A	AU 2001-59702	20010510
EP 1282452	A1	EP 2001-933264	20010510

EP 1282452 A1	WO 2001-US15070 20010510
US 20040010320 A1	WO 2001-US15070 20010510
US 20040010320 A1	US 2003-275618 20030702
US 7108721 B2	WO 2001-US15070 20010510
US 7108721 B2	US 2003-275618 20030702

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2001059702	A	Based on	WO 2001085226	A
EP 1282452	A1	Based on	WO 2001085226	A
US 7108721	B2	Based on	WO 2001085226	A

PRIORITY APPLN. INFO: GB 2000-11244 20000511
AN 2002-147460 [200219] WPIX
AB WO 2001085226 A1 UPAB: 20050525
NOVELTY - Tissue graft is generated by implanting a biocompatible scaffold in mammal in direct contact with, or adjacent to, for allowing cells of target tissues to associate with the scaffold, and removing the tissue graft from mammal.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (i) tissue graft obtained by the method; and (ii) a method of treating mammal having tissue defect by implanting the tissue graft into the mammal at the site of the tissue defect.
USE - In tissue reconstructive surgeries for treatment of connective tissues such as skin, ligament, cartilage, bone and tendon.
ADVANTAGE - The scaffold following removal from the manual, is suitable for use as a graft without the addition of any other cell type. The necessity for seeding the scaffold with cells is avoided. This enables simpler and less time-consuming procedure. A wide variety of tissue graft including cells of target type(s), can be generated. The scaffold generates a graft that includes living cell and essentially retain their shape and mechanical integrity. Poly(lactic acid) has good mechanical strength and does not reabsorb quickly. Thus its mechanical properties can be retained for a time sufficient for tissue in growth to occur. The non-bioreabsorbable materials essentially retains their initial mechanical properties and their strength does not lessen over time. The open volume of the scaffold allows adequate number of cells and sufficient nutrients to permeate quickly through the structure and provides desirable mechanical properties (such as high compressive modulus in articular cartilage implants). Scaffold including knitted or woven material can be arranged as a spacer fabric, and easily adjusted to give specific architecture. Braided material included in the first elongate material has favorable load to elongation relationship (i.e., high strength incorporating sufficient elasticity). The tape included in the scaffold can be heat sealed with the binder to prevent fraying at the edges and to prevent detachment of the tape from the scaffold. Chain-stitched material included in the second elongate element serves as a spacer element without occupying much space. The sheet included in the scaffold excludes in-growth of unwanted tissue phenotypes and prevents/reduces infiltration of unwanted cells through scaffold. The scaffold is reinforced by components such as reabsorbable or non-bioreabsorbable polymers.

L12 ANSWER 120 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-034076 [200204] WPIX
CROSS REFERENCE: 2003-758187; 2004-156710; 2004-542690; 2006-174156; 2007-445476; 2008-F28682
DOC. NO. CPI: C2002-009443 [200204]

DOC. NO. NON-CPI: N2002-026273 [200204]
TITLE: Resorbable scar-tissue reduction micro-membrane for attenuating post-surgical scar-tissue comprises implant containing single layer of resorbable, non-porous, polylactide polymers
DERWENT CLASS: A96; D22; A23; B07; P32; P34
INVENTOR: CALHOUN C J; CALHOUN J; HOLMES E; HOLMES R E; CALHOUN C; HOLMES R
PATENT ASSIGNEE: (AMES-I) AMES C P; (BOIS-I) BU BOIS B A; (CALH-I) CALHOUN C J; (HOLM-I) HOLMES R E; (MACR-N) MACROPORE BIOSURGERY INC; (MACR-N) MACROPORE INC; (MAST-N) MAST BIOSURGERY AG; (TAYL-I) TAYLOR W R; (AMES-I) AMES C; (BUBO-I) BU BOIS B; (TAYL-I) TAYLOR W
COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001067987	A1	20010920	(200204)*	EN	33[19]		<--
US 20020001609	A1	20020103	(200207)	EN			<--
AU 2001045671	A	20010924	(200208)	EN			<--
EP 1265550	A1	20021218	(200301)	EN			<--
US 6531146	B2	20030311	(200321)	EN			<--
KR 2003014366	A	20030217	(200340)	KO			<--
US 20030152608	A1	20030814	(200355)#	EN			
JP 2003526450	W	20030909	(200360)	JA	36		
US 6673362	B2	20040106	(200411)	EN			
CN 1464782	A	20031231	(200422)	ZH			
EP 1265550	B1	20050525	(200539)	EN			
DE 60111029	E	20050630	(200545)	DE			
MX 2002008897	A1	20041201	(200561)	ES			
EP 1588675	A1	20051026	(200570)	EN			
DE 60111029	T2	20060504	(200632)	DE			
AU 2001245671	B2	20060413	(200675)	EN			
CN 1268303	C	20060809	(200703)	ZH			
AU 2001245671	B8	20060601	(200705)	EN			
MX 243005	B	20070105	(200760)	ES			
EP 1852087	A1	20071107	(200774)	EN			
EP 1588675	B1	20071121	(200779)	EN			
DE 60131577	E	20080103	(200805)	DE			
ES 2299949	T3	20080601	(200839)	ES			
DE 60131577	T2	20081023	(200903)	DE			
CA 2402650	C	20090217	(200922)	EN			
KR 795613	B1	20080121	(200939)	KO			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001067987 A1		WO 2001-US7989	20010312
US 20020001609 A1	Provisional	US 2000-196869P	20000310
US 6531146 B2	Provisional	US 2000-196869P	20000310
US 6673362 B2	Provisional	US 2000-196869P	20000310

US 20020001609 A1 Provisional	US 2000-231800P 20000911
US 6531146 B2 Provisional	US 2000-231800P 20000911
US 6673362 B2 Provisional	US 2000-231800P 20000911
AU 2001045671 A	AU 2001-45671 20010312
AU 2001245671 B2	AU 2001-245671 20010312
AU 2001245671 B8	AU 2001-245671 20010312
CA 2402650 C	CA 2001-2402650 20010312
CN 1464782 A	CN 2001-809239 20010312
CN 1268303 C	CN 2001-809239 20010312
DE 60111029 E	DE 2001-60111029 20010312
DE 60111029 T2	DE 2001-60111029 20010312
DE 60131577 E	DE 2001-60131577 20010312
DE 60131577 T2	DE 2001-60131577 20010312
EP 1265550 A1	EP 2001-918615 20010312
EP 1265550 B1	EP 2001-918615 20010312
DE 60111029 E	EP 2001-918615 20010312
EP 1588675 A1 Div Ex	EP 2001-918615 20010312
DE 60111029 T2	EP 2001-918615 20010312
EP 1852087 A1 Div Ex	EP 2001-918615 20010312
EP 1588675 B1 Div Ex	EP 2001-918615 20010312
JP 2003526450 W	JP 2001-566458 20010312
US 20020001609 A1	US 2001-805411 20010312
US 6531146 B2	US 2001-805411 20010312
US 20030152608 A1 Cont of	US 2001-805411 20010312
US 6673362 B2 Cont of	US 2001-805411 20010312
EP 1265550 A1 PCT Application	WO 2001-US7989 20010312
JP 2003526450 W PCT Application	WO 2001-US7989 20010312
EP 1265550 B1 PCT Application	WO 2001-US7989 20010312
DE 60111029 E PCT Application	WO 2001-US7989 20010312
MX 2002008897 A1 PCT Application	WO 2001-US7989 20010312
DE 60111029 T2 PCT Application	WO 2001-US7989 20010312
MX 243005 B PCT Application	WO 2001-US7989 20010312
CA 2402650 C PCT Application	WO 2001-US7989 20010312
KR 2003014366 A	KR 2002-711891 20020910
MX 2002008897 A1	MX 2002-8897 20020912
MX 243005 B	MX 2002-8897 20020912
US 20030152608 A1	US 2003-385399 20030310
US 6673362 B2	US 2003-385399 20030310
EP 1588675 A1	EP 2005-76161 20010312
EP 1588675 B1	EP 2005-76161 20010312
DE 60131577 E	EP 2005-76161 20010312
ES 2299949 T3	EP 2005-76161 20010312
DE 60131577 T2	EP 2005-76161 20010312
EP 1852087 A1 Div Ex	EP 2005-76161 20050518
EP 1852087 A1	EP 2007-15470 20010312
EP 1588675 B1 Related to	EP 2007-15470 20070807
KR 795613 B1 PCT Application	WO 2001-US7989 20010312
KR 795613 B1	KR 2002-711891 20020910

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60111029	E	Based on	EP 1265550	A
EP 1588675	A1	Div ex	EP 1265550	A
DE 60111029	T2	Based on	EP 1265550	A
EP 1852087	A1	Div ex	EP 1265550	A
EP 1588675	B1	Div ex	EP 1265550	A
EP 1852087	A1	Div ex	EP 1588675	A

DE 60131577	E	Based on	EP 1588675	A
ES 2299949	T3	Based on	EP 1588675	A
DE 60131577	T2	Based on	EP 1588675	A
EP 1588675	B1	Related to	EP 1852087	A
US 20030152608	A1	Cont of	US 6531146	B
US 6673362	B2	Cont of	US 6531146	B
AU 2001045671	A	Based on	WO 2001067987	A
EP 1265550	A1	Based on	WO 2001067987	A
JP 2003526450	W	Based on	WO 2001067987	A
EP 1265550	B1	Based on	WO 2001067987	A
DE 60111029	E	Based on	WO 2001067987	A
MX 2002008897	A1	Based on	WO 2001067987	A
DE 60111029	T2	Based on	WO 2001067987	A
AU 2001245671	B2	Based on	WO 2001067987	A
AU 2001245671	B8	Based on	WO 2001067987	A
MX 243005	B	Based on	WO 2001067987	A
CA 2402650	C	Based on	WO 2001067987	A
KR 795613	B1	Previous Publ	KR 2003014366	A
KR 795613	B1	Based on	WO 2001067987	A

PRIORITY APPLN. INFO: US 2000-196869P 20000310
US 2000-231800P 20000911
US 2001-805411 20010312
US 2003-385399 20030310

AN 2002-034076 [200204] WPIX

CR 2003-758187; 2004-156710; 2004-542690; 2006-174156; 2007-445476; 2008-F28682

AB WO 2001067987 A1 UPAB: 20060118

NOVELTY - A resorbable scar-tissue reduction micro-membrane comprises an implant containing a single layer of resorbable polymer base material (SLRPBM) having uniform composition with smooth surfaces. The non-porous SLRPBM comprises polymer or co-polymer of poly-lactide(s), has thickness of 10-300 mu, and is resorbed into the body within 18-24 months.

DETAILED DESCRIPTION - The resorbable scar-tissue reduction micro- membrane for attenuating formation of post-surgical scar-tissue between healing post-surgical site (PSS) and adjusting surrounding tissue, following an in vivo surgical procedure, comprises an implant having a pre-implant configuration containing a single layer of resorbable polymer base material (SLRPBM) having uniform composition, with smooth surfaces. The SLRPBM, containing polymer or co-polymer of poly-lactide(s), has thickness of 10-300 mu and is resorbed into the mammalian body within 18-24 months from an initial implantation. The SLRPBM maintains a smooth surface barrier between healing sites and adjacent tissue, for an extended period of time sufficient to attenuate or eliminate any formation of scar-tissue between PSS and adjacent surrounding tissue.

USE - For attenuating formation of post-surgical adhesions between post-surgical site and adjacent surrounding tissue (claimed), used in surgical applications: such as surgical repair of fracture orbital floors, nasal septum and perforated ear drum barrier membrane; as protective sheathing to facilitate osteogenesis; surgical repair of urethral anatomy and urethral structure; prevention of synostosis in completed corrective surgery for cranial fusions and forearm fractures; lessening of soft-tissue fibrosis or bony growth; as temporary covering for gastroschisis and for pre-natal rupture omphalocele during staged repair procedures; for guided tissue regeneration between teeth and gingival margin; for repair of tympanic membrane, dural coverings, nerves , heart vessel, hernia and tendon anastomoses; as temporary joint spacers; as wound dressings; and as scar coverings.

ADVANTAGE - The re-absorbable micro-membrane (MM) implant can be used in various surgical contexts to retard or prevent tissue adhesion and reduce scarring. The polylactide polymers and copolymer require relatively simple

chemical reactions and formulations, and induce only relatively minor localized tissue inflammation, and thereby reduce scars in tissues. The MM is very smooth, non-porous, bio-absorbable, does not allow interaction of tissues, reduces tissue turbulence, enhances tissue guidance and minimizes scar formation. The smooth uninterrupted surface of barrier membrane facilitates movement of dura and local tissues across the implanted area, and hence reduces frictional rubbing and wearing which may induce scar tissue formation. The fluid impermeable MM has semi-rigid construction, and can be contoured either in presence or absence of heat. Imposition of MM as barrier between the para vertebral musculature and epidural space, effectively reduces cellular trafficking and vascular invasion into epidural space, from the over-lining muscle and adjacent exposed cancellous bone. The MM does not interfere with normal posterior wound healing, but inhibits unwanted adhesion and scarring. The MM accelerates the rate of absorption of implants and maintains its structural integrity for at least 7 weeks before degrading, so that anti-scarring function can be achieved and optimized. The MM is effectively sealed in sterilized packages, and it may also be used in combination with a fixation device for stabilizing bone defects.

L12 ANSWER 121 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-010224 [200201] WPIX
CROSS REFERENCE: 1995-240363; 2001-476303; 2002-155107; 2003-090596; 2004-167549; 2006-018294; 2008-B77289
DOC. NO. CPI: C2002-002431 [200201]
DOC. NO. NON-CPI: N2002-008562 [200201]
TITLE: Orthopedic implant for hip and knee, comprises implant element containing ordered micro-geometric, repetitive patterns for promoting rate, orientation and direction of growth of cell colonies of bones
DERWENT CLASS: D22; P32
INVENTOR: ALEXANDER H; HOLLANDER B L; KOZAK I; NAIMAN C; NAIMAN H; RICCI J; HOLLANDER B; NAIMAN C D
PATENT ASSIGNEE: (ALEX-I) ALEXANDER H; (BIOL-N) BIOLOK INT INC; (HOLL-I) HOLLANDER B L; (KOZA-I) KOZAK I; (NAIM-I) NAIMAN H; (RICC-I) RICCI J
COUNTRY COUNT: 51

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 20010039454	A1	20011108	(200201)*	EN	15[28]		<--
							<--
WO 2002069851	A1	20020912	(200270)	EN			<--
EP 1365711	A1	20031203	(200380)	EN			
							<--
AU 2002306469	A1	20020919	(200433)	EN			<--
EP 1365711	B1	20080409	(200827)	EN			
DE 60226011	E	20080521	(200836)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20010039454	A1 Cont of	US 1993-146790	19931102
US 20010039454	A1 Cont of	US 1995-390805	19950215
US 20010039454	A1 Cont of	US 1996-639712	19960429

US 20010039454 A1 CIP of	US 1997-996224 19971222
US 20010039454 A1 CIP of	US 2000-500038 20000208
US 20010039454 A1	US 2001-784284 20010216
AU 2002306469 A1	AU 2002-306469 20020211
EP 1365711 A1	EP 2002-748352 20020211
EP 1365711 B1	EP 2002-748352 20020211
WO 2002069851 A1	WO 2002-US4093 20020211
EP 1365711 A1	WO 2002-US4093 20020211
EP 1365711 B1	WO 2002-US4093 20020211
DE 60226011 E	DE 2002-60226011 20020211
DE 60226011 E	EP 2002-748352 20020211
DE 60226011 E	WO 2002-US4093 20020211

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
US 20010039454	A1	CIP of	US 6147666	A
EP 1365711	A1	Based on	WO 2002069851	A
AU 2002306469	A1	Based on	WO 2002069851	A
EP 1365711	B1	Based on	WO 2002069851	A
DE 60226011	E	Based on	EP 1365711	A
DE 60226011	E	Based on	WO 2002069851	A

PRIORITY APPLN. INFO: US 2001-784284 20010216
US 1993-146790 19931102
US 1995-390805 19950215
US 1996-639712 19960429
US 1997-996224 19971222
US 2000-500038 20000208

AN 2002-010224 [200201] WPIX

CR 1995-240363; 2001-476303; 2002-155107; 2003-090596; 2004-167549; 2006-018294; 2008-B77289

AB US 20010039454 A1 UPAB: 20060202
NOVELTY - Novel orthopedic implant comprises an implant element containing an ordered micro-geometric, repetitive patterns (112) defining a guide. The guide preferentially promotes the rate, orientation and direction of growth of cell colonies of bones contacted with the pattern.
DETAILED DESCRIPTION - Novel orthopedic implant comprises an implant element for surgical insertion into a bone or bone-related tissues of patient. The element comprises an ordered micro-geometric, repetitive surface pattern having multiple-parallel alternating ridges and grooves. The grooves have width of 2-25 microns and depth of 2-25 microns.
USE - As orthopedic implant for hip, knee, shoulder, elbow, ankle and finger (claimed), especially as anchor for bones and soft tissues.
ADVANTAGE - The implant enhances direct adhesion to tissue and osseointegration of implant to bone. The implant controls rate and direction of cell colony growth and growth of different cell types, surrounding surgical implant. The implant promotes rate and orients the direction of bone growth, and discourages growth of soft tissues to achieve secure fixation of implant surface to bone tissue. Promotes rate and orients direction of growth of soft tissue, while discouraging the growth of bone tissue to achieve soft integration with implant surface and/or create a barrier that discourages growth of soft tissues, particularly soft fibrous tissues, thereby preventing migration of soft tissue growth in bone tissue attachment surfaces of implant. The micro-grooved surfaces showed significantly greater bone in-growth and apposition, than the conventional industrial standard roughened surfaces.
DESCRIPTION OF DRAWINGS - The figure shows conceptual view of a hip implant.
Micro-geometric repetitive patterns (112)

L12 ANSWER 122 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-656903 [200175] WPIX
CROSS REFERENCE: 2002-010703
DOC. NO. CPI: C2001-193259 [200175]
TITLE: New glycyl lysine derivatives chemically attached to a linking group, useful as integrin alphaVbeta3 antagonists for inhibiting angiogenesis and tumor growth
DERWENT CLASS: B05
INVENTOR: BOGER D L; CHERESH D A
PATENT ASSIGNEE: (BOGE-I) BOGER D L; (CHER-I) CHERESH D A; (SCRI-C) SCRIPPS RES INC; (SCRI-C) SCRIPPS RES INST
COUNTRY COUNT: 94

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001072699	A1	20011004	(200175)*	EN	59[5]		<--
AU 2001051018	A	20011008	(200208)	EN			<--
NO 2002004576	A	20021120	(200307)	NO			<--
NO 2002004578	A	20021120	(200307)	NO			<--
EP 1276713	A1	20030122	(200308)	EN			<--
KR 2002084258	A	20021104	(200320)	KO			<--
CZ 2002003510	A3	20030312	(200324)	CS			<--
KR 2002091156	A	20021205	(200324)	KO			<--
SK 2002001484	A3	20030401	(200331)	SK			<--
US 20030083519	A1	20030501	(200331)	EN			
JP 2003528850	W	20030930	(200365)	JA	65		
HU 2003001797	A2	20030929	(200369)	HU			
CN 1441777	A	20030910	(200380)	ZH			
MX 2002009504	A1	20030501	(200415)	ES			
ZA 2002008628	A	20040428	(200432)	EN	71		
US 6803383	B2	20041012	(200469)	EN			
AU 2001251018	B2	20051201	(200623)	EN			
MX 229369	B	20050722	(200627)	ES			
RU 2276133	C2	20060510	(200634)	RU			
CN 1229339	C	20051130	(200652)	ZH			
CN 1245967	C	20060322	(200660)	ZH			
KR 776185	B1	20071116	(200835)	KO			
KR 767616	B1	20071018	(200837)	KO			
CA 2403871	C	20100511	(201033)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001072699	A1	WO 2001-US9756	20010327
US 6803383	B2 Provisional	US 2000-192260P	20000327

AU 2001051018 A	AU 2001-51018 20010327
AU 2001251018 B2	AU 2001-251018 20010327
CN 1245967 C	CN 2001-809743 20010327
CN 1441777 A	CN 2001-809744 20010327
CN 1229339 C	CN 2001-809744 20010327
EP 1276713 A1	EP 2001-924359 20010327
JP 2003528850 W	JP 2001-570612 20010327
NO 2002004576 A	WO 2001-US9785 20010327
NO 2002004578 A	WO 2001-US9756 20010327
EP 1276713 A1	WO 2001-US9756 20010327
CZ 2002003510 A3	WO 2001-US9756 20010327
SK 2002001484 A3	WO 2001-US9756 20010327
US 20030083519 A1	WO 2001-US9756 20010327
JP 2003528850 W	WO 2001-US9756 20010327
HU 2003001797 A2	WO 2001-US9756 20010327
MX 2002009504 A1	WO 2001-US9756 20010327
US 6803383 B2	WO 2001-US9756 20010327
MX 229369 B	WO 2001-US9756 20010327
RU 2276133 C2	WO 2001-US9756 20010327
KR 776185 B1	WO 2001-US9756 20010327
KR 767616 B1	WO 2001-US9785 20010327
CZ 2002003510 A3	CZ 2002-3510 20010327
RU 2276133 C2	RU 2002-128751 20010327
SK 2002001484 A3	SK 2002-1484 20010327
NO 2002004576 A	NO 2002-4576 20020924
NO 2002004578 A	NO 2002-4578 20020924
KR 2002091156 A	KR 2002-712720 20020926
KR 776185 B1	KR 2002-712720 20020926
KR 2002084258 A	KR 2002-712724 20020926
KR 767616 B1	KR 2002-712724 20020926
MX 2002009504 A1	MX 2002-9504 20020927
MX 229369 B	MX 2002-9504 20020927
US 20030083519 A1	US 2002-240141 20020927
US 6803383 B2	US 2002-240141 20020927
ZA 2002008628 A	ZA 2002-8628 20021024
HU 2003001797 A2	HU 2003-1797 20010327
CA 2403871 C	CA 2001-2403871 20010327
CA 2403871 C PCT Application	WO 2001-US9756 20010327

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
KR 767616	B1	Previous Publ	KR 2002084258	A
KR 776185	B1	Previous Publ	KR 2002091156	A
KR 767616	B1	Based on	WO 2001072297	A
AU 2001051018	A	Based on	WO 2001072699	A
EP 1276713	A1	Based on	WO 2001072699	A
CZ 2002003510	A3	Based on	WO 2001072699	A
SK 2002001484	A3	Based on	WO 2001072699	A
JP 2003528850	W	Based on	WO 2001072699	A
HU 2003001797	A2	Based on	WO 2001072699	A
MX 2002009504	A1	Based on	WO 2001072699	A
US 6803383	B2	Based on	WO 2001072699	A
AU 2001251018	B2	Based on	WO 2001072699	A
MX 229369	B	Based on	WO 2001072699	A
RU 2276133	C2	Based on	WO 2001072699	A
KR 776185	B1	Based on	WO 2001072699	A
CA 2403871	C	Based on	WO 2001072699	A

PRIORITY APPLN. INFO: US 2000-192260P 20000327
US 2002-240141 20020927
AN 2001-656903 [200175] WPIX
CR 2002-010703
AB WO 200107699 A1 UPAB: 20100524
NOVELTY - New glycyl lysine derivatives chemically attached to a linking group, which bind to integrin alphaVbeta3 and block the interaction of integrin alphaVbeta3 with matrix metalloproteinase 2 (MMP2) are disclosed.
DETAILED DESCRIPTION - Glycyl lysine derivatives chemically attached to a linking group of formula (I) are new. G1,G2 = -NH-C(O)-O-R1, -NH-C(O)-O-(CH2)v-(C6H4)-X1, -NH-C(O)-NH-(CH2)v-(C6H4)-X1, -O-C(O)-NH-(CH2)v-(C6H4)-X1, -O-C(O)-O-(CH2)v-(C6H4)-X1, or -NH-C(O)-CH2-(C6H4)-X1; Y1, Y2 = OH, 1-4C (hydroxy)alkyl, 1-4C alkoxy, phenyl, benzyl, or NH2;
R1 = 1-4C alkyl;
t = 0-1;
X1 = halo, nitro, 1-4C alkyl, 1-4C alkoxy, or 1-4C perfluoroalkyl; Z = -CC-, -C6H4-, cis-CH=CH-, trans-CH=CH-, cis-CH2-CH=CH-CH2-, trans-CH2-CH=CH-CH2-, 1,4-naphthyl, cis-1,3-cyclohexyl, trans-1,3-cyclohexyl, cis-1,4-cyclohexyl, or trans-1,4-cyclohexyl; A = H or a covalent bond;
m, n = 0 or 1; and
v = 1 or 2.
With the provisos that when A is H, t is 0; when A is a covalent bond, t is 1; when m is 0, Y1 is 1-4C hydroxyalkyl; and when n is 0, Y2 is 1-4C hydroxyalkyl.
ACTIVITY - Antiangiogenic; Cytostatic; Cytotoxic; Antiinflammatory. Primary tumors were grown on CAMs (chick chorioallontoic membranes) of 9-day embryos by implantation of 5x10 to the power 6 CS-1 cells and incubation for 7 days. 50 mg sections of these tumors were subcultured onto fresh 9-day CAMs and allowed to implant for 24 hours before a single intravenous (i.v.) injection with 100 microl of 100 microM of test compounds in Hank's balanced saline solution (HBSS). Buffer alone was used as control. Tumors were incubated for 10 days, harvested and trimmed free of excess stromal tissue before determining wet weight and processing for histology. Growth of transplanted alphaVbeta3-negative CS-1 melanoma tumors on the chick CAM was significantly retarded by a single i.v. injection of compound (Ia) as was tumor weight. A gross reduction in the surface vasculature as well as the overall blood vessel density was evident in the tumors that had been treated with N,N'-bis-((5-(S)-carboxy-5(((4- trifluoromethyl)benzylcarbonyl)amino)-pentyl)carboxamidomethyl)benzene-1,3- dicarboxamide (Ia). This reduction in tumor vasculature was associated with significant cell death within the tumor mass, even as the control tumors showed a 6-fold increase in mass during the 10-day time frame of the assay.
MECHANISM OF ACTION - Integrin alphaVbeta3 antagonist. To identify a specific inhibitor of the binding interaction between MMP2 and integrin alphaVbeta3, solid phase receptor binding assays were performed with immobilized integrins and biotinylated MMP2. The binding of purified MMP2 was found to be entirely RGD-independent in this system, as evidenced by the lack of effect of cRGDfV on MMP2 binding to integrin alphaVbeta3, even though this peptide inhibited the interaction of alphaVbeta3, with its extracellular matrix ligand, vitronectin (VN). The binding of MMP2, but not that of VN, was completely abrogated by the compound N,N'-bis-((5-(S)-carboxy-5(((4-trifluoromethyl)benzylcarbonyl)amino)-pentyl)carboxamidomethyl)benzene-1,3-dicarboxamide (Ia), showing the specificity of (Ia) for the interaction between MMP2 and alphaVbeta3. The binding between MMP2 and tissue inhibitor of metalloproteinase 2 (TIMP2) was further not inhibited by (Ia), supporting the contention that the effect of (Ia) is restricted to the binding between MMP2 and integrin alphaVbeta3, and showing a distinction between the binding sites for the MMP2 PEX (undefined) domain on TIMP2 and integrin alphaVbeta3.

USE - (I) can be used for inhibiting angiogenesis in tumor tissue and inhibiting tumor growth (claimed). They can induce apoptosis in tumor cells and inhibit the interaction of MMP2 with integrin alphaVbeta3 in a host cell (claimed). They can also be used to treat other disorders involving undesired angiogenesis. Because the compounds bind to alphaVbeta3, they can also be used to suppress inflammatory events.

L12 ANSWER 123 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER:	2001-616346 [200171] WPIX
DOC. NO. CPI:	C2001-184506 [200171]
DOC. NO. NON-CPI:	N2001-459763 [200171]
TITLE:	Splint assembly for treating dilated heart chambers and/or improving cardiac function, includes elongated member, first and second heart-engaging assemblies, and fixation member
DERWENT CLASS:	A96; D22; P31; P34; P32
INVENTOR:	KUSZ A; KUSZ D A; LAPLANTE J P; LAPLANTE P; MORTIER J; MORTIER T J; PAULSON M; PAULSON T M; SCHROEDER F; SCHROEDER R F; SCHWEICH C J; SCHWEICH J; VIDLUND M; VIDLUND R M; KUSZ D; LAPLANTE J; MORTIER T; PAULSON T; SCHROEDER R; SCHWEICH C; VIDLUND R
PATENT ASSIGNEE:	(MYOC-N) MYOCOR INC
COUNTRY COUNT:	94

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001070116	A1	20010927	(200171)*	EN	62[14]		<--
AU 2001047602	A	20011003	(200210)	EN			<--
EP 1265534	A1	20021218	(200301)	EN			<--
US 20030050529	A1	20030313	(200321)	EN			<--
US 6537198	B1	20030325	(200325)	EN			<--
EP 1265534	B1	20040602	(200441)	EN			
DE 60103618	E	20040708	(200445)	DE			
DE 60103618	T2	20050616	(200540)	DE			
US 7044905	B2	20060516	(200633)	EN			
US 20060149123	A1	20060706	(200645)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001070116	A1	WO 2001-US8892	20010320
US 20030050529	A1 Cont of	US 2000-532049	20000321
US 6537198	B1	US 2000-532049	20000321
US 7044905	B2 Cont of	US 2000-532049	20000321
AU 2001047602	A	AU 2001-47602	20010320
DE 60103618	E	DE 2001-603618	20010320
DE 60103618	T2	DE 2001-603618	20010320
EP 1265534	A1	EP 2001-920566	20010320
EP 1265534	B1	EP 2001-920566	20010320
DE 60103618	E	EP 2001-920566	20010320
DE 60103618	T2	EP 2001-920566	20010320

EP 1265534 A1	WO 2001-US8892 20010320
EP 1265534 B1	WO 2001-US8892 20010320
DE 60103618 E	WO 2001-US8892 20010320
DE 60103618 T2	WO 2001-US8892 20010320
US 20030050529 A1	US 2002-278847 20021024
US 7044905 B2	US 2002-278847 20021024
US 20060149123 A1 Cont of	US 2000-532049 20000321
US 20060149123 A1 Cont of	US 2002-278847 20021024
US 20060149123 A1	US 2006-368445 20060307

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60103618	E	Based on	EP 1265534	A
DE 60103618	T2	Based on	EP 1265534	A
US 7044905	B2	Cont of	US 6537198	B
AU 2001047602	A	Based on	WO 2001070116	A
EP 1265534	A1	Based on	WO 2001070116	A
EP 1265534	B1	Based on	WO 2001070116	A
DE 60103618	E	Based on	WO 2001070116	A
DE 60103618	T2	Based on	WO 2001070116	A
US 20060149123	A1	Cont of	US 6537198	B
US 20060149123	A1	Cont of	US 7044905	B

PRIORITY APPLN. INFO: US 2000-532049 20000321
US 2002-278847 20021024
US 2006-368445 20060307

AN 2001-616346 [200171] WPIX

AB WO 2001070116 A1 UPAB: 20060118

NOVELTY - A splint assembly (1) consists of an elongated member (2) extending transverse to a heart chamber, first and second heart-engaging assemblies (3, 4) for respectively engaging first and second exterior locations of a heart wall, and a fixation member to penetrate the elongated member to hold the first and/or the second heart-engaging assembly in a fixed position along the elongated member.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (A) an apparatus for determining and marking a location on a heart wall comprising a marker delivery mechanism and an actuator for delivering the marker to the location; and

(B) a tool for fixing an elongated member to a housing comprising an engagement member, a wire, and a handle.

USE - The assembly is used to treat dilated heart chambers and/or to improve cardiac function. It is also used to treat heart failure resulting from aneurysms.

ADVANTAGE - The splint assembly is non-pharmacological and passive, and reduces heart wall tension by changing the geometry or shape and/or the radius of curvature or cross-section of a heart chamber. It is easy to manufacture and use, and the related inventive surgical techniques and tools for implanting the device do not require invasive procedures of current surgical techniques. The assembly is also less risky to the patient compared to other techniques because it does not require removing portions of heart tissue, opening the heart chamber, or stopping the heart during operation. DESCRIPTION OF DRAWINGS - The figure is a plan view of the splint and a leader assemblies.

Splint assembly (1)

Elongated member (2)

Heart-engaging assemblies (3, 4)

L12 ANSWER 124 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-611167 [200170] WPIX
DOC. NO. CPI: C2001-182503 [200170]
DOC. NO. NON-CPI: N2001-456237 [200170]
TITLE: New biomedical implant useful for various medical applications e.g. bone fracture fixation is derived from tissue and shaped in the form of tape
DERWENT CLASS: A96; B04; D22; P32; P34
INVENTOR: DONDA R S; GROOMS J M; SANDER T
PATENT ASSIGNEE: (DOND-I) DONDA R S; (GROO-I) GROOMS J M; (REGE-N) REGENERATION TECHNOLOGIES INC; (SAND-I) SANDER T
COUNTRY COUNT: 90

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001060424	A2	20010823	(200170)*	EN	18[0]		<--
							<--
US 20010038848	A1	20011108	(200171)	EN			<--
							<--
AU 2001041594	A	20010827	(200176)	EN			<--
							<--
EP 1286707	A2	20030305	(200319)	EN			<--
JP 2003535620	W	20031202	(200382)	JA	23		
AU 2001241594	A8	20051006	(200612)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001060424	A2	WO 2001-US5414	20010220
US 20010038848	A1 Provisional	US 2000-183468P	20000218
US 20010038848	A1 Provisional	US 2000-184203P	20000222
US 20010038848	A1 Provisional	US 2000-197477P	20000417
AU 2001041594	A	AU 2001-41594	20010220
EP 1286707	A2	EP 2001-912854	20010220
JP 2003535620	W	JP 2001-559519	20010220
US 20010038848	A1	US 2001-789292	20010220
EP 1286707	A2	WO 2001-US5414	20010220
JP 2003535620	W	WO 2001-US5414	20010220
AU 2001241594	A8	AU 2001-241594	20010220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001041594	A Based on	WO 2001060424 A
EP 1286707	A2 Based on	WO 2001060424 A
JP 2003535620	W Based on	WO 2001060424 A
AU 2001241594	A8 Based on	WO 2001060424 A

PRIORITY APPLN. INFO: US 2000-197477P 20000417
US 2000-183468P 20000218
US 2000-184203P 20000222
US 2001-789292 20010220
AN 2001-611167 [200170] WPIX
AB WO 2001060424 A2 UPAB: 20050526

NOVELTY - A biomedical implant (a) derived from tissue is shaped in the form of tapes and rolled into a spool.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) repairing soft or hard tissue and organs involving obtaining (a) and peeling (a) from the spool; (2) a biomedical implant (b) comprising a section of tissue (preferably dermis tissue) infused with at least one growth factor and/or nucleic acids; (3) repairing damaged tissue or stimulating the generation of tissue involving obtaining the section infused with the growth factor and implanting the section into the patient;
(4) platelet rich plasma (PRP) obtained from an allogenic or xenogenic tissue source;
(5) obtaining PRP involving procuring blood that has been removed from living or cadaveric donors or both and separating PRP from other blood components;
(6) a growth factor composition comprising at least one growth factor that has been extracted from PRP; (7) an article of manufacture comprising a container and the growth factor composition disposed within the container; (8) repairing the wound, defect or other injury involving contacting an implant with the PRP or with at least one growth factor extracted from the PRP and implanting the implant in the patient;
(9) a biomedical implant (c) comprising an osteogenic material and shaped into the form of tape and rolled into a spool; and (10) a method useful in medical procedures involving fixating bone fractures, ridge augmentation or sealing a graft implant site involving obtaining (c) and peeling a portion of (c) off the spool.
USE - For repairing soft or hard tissue and organs (preferably for repairing tissue and/or fracture fixation, guided tissue regeneration, implanting a spinal tension band, anterior ligament replacement or providing supports to ligaments), for repairing damaged tissue or stimulating the generation of tissue , repairing a wound, defect or other injury, in medical procedures involving fixating bone fractures, ridge augmentation or sealing a graft implant site (all claimed). For repairing of injuries to organs caused by trauma or disease.
ADVANTAGE - The biomedical implants are readily usable, non-immunogenic biomaterial and simple to use.

L12 ANSWER 125 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-611072 [200170] WPIX
DOC. NO. CPI: C2001-182438 [200170]
DOC. NO. NON-CPI: N2001-456177 [200170]
TITLE: Pre-formed three-dimensional device for closing surgical puncture, comprises hydratable material capable of bonding to tissue
DERWENT CLASS: A96; B07; D22; P31; P32; P34
INVENTOR: EDWARDSON P; FORTUNE D; MANDLEY D; TROTTER P; VELADA J
PATENT ASSIGNEE: (EDWA-I) EDWARDSON P; (FORT-I) FORTUNE D; (MAND-I) MANDLEY D; (TISS-N) TISSUEMED LTD; (TROT-I) TROTTER P; (VELA-I) VELADA J
COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001056475	A1	20010809	(200170)*	EN	48[24]		<--
							<--
AU 2001030405	A	20010814	(200173)	EN			<--
							<--
EP 1253857	A1	20021106	(200281)	EN			<--

JP 2003521326 W 20030715 (200347) JA 54
US 20040215231 A1 20041028 (200471) EN
AU 778318 B2 20041125 (200506) EN
EP 1253857 B1 20090121 (200908) EN
DE 60137489 E 20090312 (200919) DE

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001056475 A1		WO 2001-GB454	20010205
AU 2001030405 A		AU 2001-30405	20010205
AU 778318 B2		AU 2001-30405	20010205
EP 1253857 A1		EP 2001-902554	20010205
EP 1253857 B1		EP 2001-902554	20010205
JP 2003521326 W		JP 2001-556174	20010205
EP 1253857 A1		WO 2001-GB454	20010205
JP 2003521326 W		WO 2001-GB454	20010205
US 20040215231 A1		WO 2001-GB454	20010205
EP 1253857 B1	PCT Application	WO 2001-GB454	20010205
US 20040215231 A1		US 2002-182044	20021101
DE 60137489 E		DE 2001-60137489	20010205
DE 60137489 E		EP 2001-902554	20010205
DE 60137489 E	PCT Application	WO 2001-GB454	20010205

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 778318	B2	Previous Publ	AU 2001030405	A
AU 2001030405	A	Based on	WO 2001056475	A
EP 1253857	A1	Based on	WO 2001056475	A
JP 2003521326	W	Based on	WO 2001056475	A
AU 778318	B2	Based on	WO 2001056475	A
EP 1253857	B1	Based on	WO 2001056475	A
DE 60137489	E	Based on	EP 1253857	A
DE 60137489	E	Based on	WO 2001056475	A

PRIORITY APPLN. INFO: GB 2000-2378 20000203
GB 2000-2379 20000203

AN 2001-611072 [200170] WPIX

AB WO 2001056475 A1 UPAB: 20050706

NOVELTY - A pre-formed three-dimensional device, comprises hydratable material capable of bonding to tissue while retaining its integrity. The device is constructed to be permanent to retain its integrity and remain in place for an indefinite period.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for closing a surgical puncture (16) comprising passing into an organ or vessel in which puncture is formed via a sheet, causing the sheet to expand within the organ or vessel (17), drawing the sheet against the internal surface of the organ or vessel, and causing the sheet to bond to the organ or vessel.

USE - The device is used for closing a surgical puncture. It is implantable in the body in the course of surgical procedures.

ADVANTAGE - The inventive device can be pre-formed into any shape for its intended application. It can be securely anchored within the tissue with reduced danger of the device becoming dislodged. DESCRIPTION OF DRAWINGS - The figure is a cut-away view of the vessel to which the device has been applied.

Sheets (11, 12)

Puncture (16)

Vessel (17)

L12 ANSWER 126 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-610566 [200170] WPIX
CROSS REFERENCE: 1997-042796; 2002-279913; 2002-453569; 2004-675608; 2005-064600
DOC. NO. CPI: C2001-182328 [200170]
TITLE: Treatment for repair of skin defects involves the use of injectable natural human extracellular matrix
DERWENT CLASS: A96; B07
INVENTOR: NAUGHTON G K
PATENT ASSIGNEE: (ADTI-N) ADVANCED TISSUE SCI INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 6284284	B1	20010904	(200170)*	EN	17[2]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6284284 B1	CIP of	US 1995-470101	19950606
US 6284284 B1	Div Ex	US 1996-660787	19960606
US 6284284 B1		US 1998-182822	19981029

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6284284 B1	CIP of	US 5830708 A

PRIORITY APPLN. INFO: US 1998-182822 19981029
US 1995-470101 19950606
US 1996-660787 19960606

AN 2001-610566 [200170] WPIX
CR 1997-042796; 2002-279913; 2002-453569; 2004-675608; 2005-064600
AB US 6284284 B1 UPAB: 20050902
NOVELTY - Treatment for the repair of skin defects involves injecting a human secreted extracellular matrix at a site of a skin or tissue defect. The matrix comprises a mixture of cell free naturally secreted human extracellular components derived from living stromal tissue formulated for in vivo administration by injection via a syringe and a carrier.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for producing the naturally secreted extracellular matrix involving: (i) providing a living stromal tissue prepared in vitro comprising human stromal cells and connective tissue proteins naturally secreted by the stromal cells attached to and substantially enveloping in a framework; (ii) killing the cells in the living stromal cells; (iii) removing the killed cells and any cellular contents from the framework; (iv) collecting the connective tissue proteins naturally secreted by the stromal cells attached to the framework; and (v) processing the collected connective tissue proteins of step (iv) with a carrier into a formulation that is suitable for in vivo administration by injection via syringe. The framework composed of a biocompatible, non-living material formed into a three-dimensional structure having interstitial spaces bridged by the stromal cells .

ACTIVITY - Antiseborrheic; Dermatological; Tranquilizer; Vulnerary.
MECHANISM OF ACTION - None given.
USE - For repair of the skin defect (claimed); for repairing or correcting congenital anomalies as hemifacial microsomia, malar and zygomatic hypoplasia, unilateral mammary hypoplasia, pectus excavatum, pectoralis agenesis (Poland's anomaly) and velopharyngeal incompetence secondary to cleft palate repair or submucous cleft palate (as a retropharyngeal implant); acquired defects such as depressed scars, subcutaneous atrophy (e.g. secondary to discoid lupis erythematosus), keratotic lesions, enophthalmos in the unucleated eye, acne pitting of the face, linear scleroderma with subcutaneous atrophy, saddle-nose deformity, Romberg's disease and unilateral vocal cord paaralysis; and cosmetic defects as glabellar frown lines, deep nasolabial creases, circum-oral geographical wrinkles, sunken cheeks, and mammary hypoplasia.
ADVANTAGE - The injectable extracellular matrix contains only human proteins therefore, there is a reduced risk of an immune response due to foreign proteins or peptides, especially the type of immune response seen with bovine collagen found in conventional injectable collagen preparation. The injected matrix preparation persist longer and even if multiple injection are required, the injections are not be subjected to not more than three injections per year rule of bovine collagen-based preparations due to the lack of immunogenicity.

L12 ANSWER 127 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-367248 [200138] WPIX
DOC. NO. CPI: C2001-112559 [200138]
TITLE: New steroidal alkaloids, useful e.g. as modulators of smoothened-dependent pathway for treating basal cell carcinoma and for regulating differentiation or proliferation of a cell
DERWENT CLASS: B01
INVENTOR: BEACHY A; BEACHY P; BEACHY P A; CHEN J; CHEN J K; TAIPALE A J; TAIPALE A J N; NIKOLAI T A J
PATENT ASSIGNEE: (UYJO-C) UNIV JOHNS HOPKINS SCHOOL MEDICINE; (UYJO-C) UNIV JOHNS HOPKINS
COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001027135	A2	20010419	(200138)*	EN	154[7]		<--
							<--
AU 2001012045	A	20010423	(200147)	EN			<--
							<--
EP 1235851	A2	20020904	(200266)	EN			<--
JP 2003516317	W	20030513	(200334)	JA	193		
AU 781524	B2	20050526	(200540)	EN			
EP 1235851	B1	20060531	(200637)	EN			
US 20060128639	A1	20060615	(200640)	EN			
DE 60028411	E	20060706	(200648)	DE			
US 7098196	B1	20060829	(200657)	EN			
EP 1728797	A2	20061206	(200680)	EN			
DE 60028411	T2	20070104	(200705)	DE			
AU 2006202843	A1	20060803	(200707)#	EN			
IL 149069	A	20070308	(200726)	EN			
US 20080255059	A1	20081016	(200869)	EN			
US 7476661	B2	20090113	(200907)	EN			
CA 2386190	C	20090414	(200927)	EN			
AU 2006202843	B2	20090820	(200957)#	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001027135 A2		WO 2000-US28479	20001013
US 20060128639 A1	Provisional	US 1999-159215P	19991013
US 7098196 B1	Provisional	US 1999-159215P	19991013
US 20080255059 A1	Provisional	US 1999-159215P	19991013
US 7476661 B2	Provisional	US 1999-159215P	19991013
US 20060128639 A1	Provisional	US 2000-229273P	20000830
US 7098196 B1	Provisional	US 2000-229273P	20000830
US 20080255059 A1	Provisional	US 2000-229273P	20000830
US 7476661 B2	Provisional	US 2000-229273P	20000830
CA 2386190 C		CA 2000-2386190	20001013
DE 60028411 E		DE 2000-60028411	20001013
DE 60028411 T2		DE 2000-60028411	20001013
EP 1235851 A2		EP 2000-973544	20001013
EP 1235851 B1		EP 2000-973544	20001013
DE 60028411 E		EP 2000-973544	20001013
EP 1728797 A2	Div Ex	EP 2000-973544	20001013
DE 60028411 T2		EP 2000-973544	20001013
IL 149069 A		IL 2000-149069	20001013
US 20060128639 A1	Cont of	US 2000-688076	20001013
US 7098196 B1		US 2000-688076	20001013
US 20080255059 A1	Cont of	US 2000-688076	20001013
US 7476661 B2	Cont of	US 2000-688076	20001013
EP 1235851 A2	PCT Application	WO 2000-US28479	20001013
JP 2003516317 W	PCT Application	WO 2000-US28479	20001013
EP 1235851 B1	PCT Application	WO 2000-US28479	20001013
DE 60028411 E	PCT Application	WO 2000-US28479	20001013
DE 60028411 T2	PCT Application	WO 2000-US28479	20001013
CA 2386190 C	PCT Application	WO 2000-US28479	20001013
AU 2001012045 A		AU 2001-12045	20001013
AU 781524 B2		AU 2001-12045	20001013
JP 2003516317 W		JP 2001-530353	20001013
EP 1728797 A2		EP 2006-11086	20001013
US 20060128639 A1		US 2006-338503	20060123
US 20080255059 A1	Cont of	US 2006-338503	20060123
US 7476661 B2		US 2006-338503	20060123
AU 2006202843 A1		AU 2006-202843	20060703
US 20080255059 A1		US 2008-79776	20080328
AU 2006202843 B2		AU 2006-202843	20060703

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 781524	B2	Previous Publ	AU 2001012045	A
AU 2006202843	A1	Div ex	AU 781524	B
DE 60028411	E	Based on	EP 1235851	A
EP 1728797	A2	Div ex	EP 1235851	A
DE 60028411	T2	Based on	EP 1235851	A
US 20080255059	A1	Cont of	US 7098196	B
US 7476661	B2	Cont of	US 7098196	B
AU 2001012045	A	Based on	WO 2001027135	A
EP 1235851	A2	Based on	WO 2001027135	A
JP 2003516317	W	Based on	WO 2001027135	A
AU 781524	B2	Based on	WO 2001027135	A

EP 1235851	B1	Based on	WO 2001027135	A	
DE 60028411	E	Based on	WO 2001027135	A	
DE 60028411	T2	Based on	WO 2001027135	A	
IL 149069	A	Based on	WO 2001027135	A	
CA 2386190	C	Based on	WO 2001027135	A	
AU 2006202843	B2	Div Ex	AU 781524	B	

PRIORITY APPLN. INFO: US 1999-159215P 19991013
US 2000-229273P 20000830
US 2000-688076 20001013
US 2006-338503 20060123
AU 2006-202843 20060703
US 2008-79776 20080328
US 1999-159215P 19991013
US 2000-229273P 20000830

AN 2001-367248 [200138] WPIX

AB WO 2001027135 A2 UPAB: 20090205
NOVELTY - Steroidal alkaloids and their analogs e.g. (Ia), (Ib), (IIa)-(IIc), (IIIa), (IIIb), (IVa) and (IVb) and their unsaturated forms and/or seco-, nor- or homo-derivatives are new.
DETAILED DESCRIPTION - Steroidal alkaloids and their analogs of formula e.g. (Ia), (Ib), (IIa)-(IIc), (IIIa), (IIIb), (IVa) and (IVb) and their unsaturated forms and/or seco-, nor- or homo-derivatives are new. (a) = single or double bond; R2-R5 = H, halo, alkyl, alkenyl, alkynyl, aryl, OH, =O, =S, alkoxy, silyloxy, amino, nitro, thiol, amine, imine, amide, phosphoryl, phosphonate, phosphine, carbonyl, carboxy, carboxamide, anhydride, silyl, ether, thioether, alkylsulfonyl, arylsulfonyl, selenoether, ketone, aldehyde, ester, sugar, carbamate, carbonate or (CH2)mR8; R6, R7, R'7, R9, R2'-R5' = absent, H, halo, alkyl, alkenyl, alkynyl, aryl, OH, =O, =S, alkoxy, silyloxy, amino, nitro, thiol, amine, imine, amide, phosphoryl, phosphonate, phosphine, carbonyl, carboxy, carboxamide, anhydride, silyl, ether, thioether, alkylsulfonyl, arylsulfonyl, selenoether, ketone, aldehyde, ester or (CH2)mR8; or R6+R7, R7+R'7 = optionally substituted ring or polycycle, which includes a tertiary amine in the ring atoms; R8 = aryl, cycloalkyl, cycloalkenyl, heterocycle or polycycle; m = 0-8;
X = O or S;
ring A, B = monocyclic or polycyclic groups; T = alkyl, aminoalkyl, carboxy, ester, amide, ether or amine linkage of 1-10 bond lengths;
T' = absent, alkyl, aminoalkyl, carboxy, ester , amide ether or amine linkage of 1-3 bond lengths, where if T and T' are both present, T and T' taken together with the ring B form a covalently closed ring of 5-8 atoms;
n, m = 0-2;
provided that A, or T, T', and B, taken together include at least one tertiary amine;
R22 = absent, alkyl, alkoxy or OH, where at least one R9 is bound to N forming a tertiary amine.
An INDEPENDENT CLAIM is also included for a method (1) for inhibiting hedgehog signaling or counteracting a ptc loss-of-function phenotype or a smoothened gain-of-function phenotype, comprising contacting the cell with e.g. (I)-(IV).
ACTIVITY - Cytostatic; neuroprotective; nootropic; cerebroprotective; dermatological; osteopathic; antiarthritic; antipsoriatic; antiinfertility; hepatotropic; vulnerary; anticonvulsant; antiparkinsonian; immunosuppressive.
MECHANISM OF ACTION - Modulator of smoothened-dependent pathway activation; inhibitors of signal transduction pathways regulated by patched (ptc) and/or smoothened; inhibitors of smoothened-dependent activity of hedgehog pathway.
A steroidal alkaloid of formula (V'a) inhibited the sonic hedgehog signaling pathway (Cooper et al, Science 280, p 1603-1607) with an IC50 value more than 100 nM.

USE - For treating basal cell carcinoma, preferably by local administration to the tumor; for regulating differentiation or proliferation of a cell; for controlling the growth or development of pancreatic tissue; for local treatment of medulloblastoma; for topical or local treatment of hyperproliferative disorder. In (1), (I)-(IV) are administered as part of a therapeutic or cosmetic application selected from regulation of neural tissue, bone and cartilage formation and repair, regulation of spermatogenesis, regulation of smooth muscle, regulation of lung, liver and other organs arising from the primative gut, regulation of hematopoietic function, and regulation of skin and hair growth (all claimed). For acute, subacute, or chronic injury to nervous system including traumatic injury, chemical injury, vascular injury and deficits (e.g. ischemia resulting from stroke), together with infectious/inflammatory and tumor-induced injury; (ii) aging of nervous system including Alzheimer's disease; (iii) chronic neurodegenerative disease e.g. Parkinson's diseases; Huntington's chorea, amylotrophic lateral sclerosis etc., and spinocerebellar degenerations; and (iv) chronic immunological diseases of nervous system or affecting nervous system, including multiple sclerosis. The compounds can be added to prosthetic device to regulate rate of growth and regeneration of dendritic processes. For regulating development and maintenance of an artificial liver. Therapeutic composition of the compounds may be used in conjunction with transplantation of such artificial livers and embryonic liver structures to regulate e.g. uptake of intraperitoneal implantation. For regulating such organs after physical, chemical or pathological insult, e.g. composition containing the compounds can be used in liver repair subsequent to partial hepatectomy. For correction of aberrant insulin expression, or modulation or differentiation. For reshaping/repairing pancreatic tissue. For controlling development and maintenance of tissue from digestive tract, spleen, lungs, urogenital organs and other organs which derive from primative gut. For in vitro generation of skeletal tissue e.g. from skeletogenic stem cells and in vivo treatment of skeletal tissue deficiencies. For regulating rate of chondrogenesis and/or osteogenesis. As part of regimen for restoring cartilage function to connective tissue, e.g. in repair of defects or lesions in cartilage tissue as a result of degenerative wear (e.g. as that which results in arthritis, or mechanical derangements caused by trauma to the tissue). For improving previous reparative procedure e.g. surgical repair of meniscus or cartilage. For preventing onset of exacerbation of degenerative disease if applied early enough after trauma. For osteoarthritis, cartilage transplantation and prosthetic device therapies. For enhancing attachment of prosthetic devices, e.g. in implantation of periodontal prosthesis. As part of regimen for generation of bone. For promotion of wound healing. For treating oral and paraoral ulcers, e.g. resulting from radiation/chemotherapy. For treating wounds resulting from dermatological diseases e.g. lesions resulting from autoimmune disorders e.g. psoriasis. For preventing post operative complications of extracapsular cataract extraction and for treating corneopathies and proliferative diseases of retinal cells and for regulating photoreceptor differentiation. For controlling hair growth (e.g. in hypertrichosis) and for managing hirsutism. As an alternative to cutting, shaving or depilation. For protecting hair follicle cells from cytotoxic agents e.g. in patients undergoing chemo- or radiation therapies which ordinarily result in hair loss. For treating autoimmune diseases affecting skin, e.g. psoriasis or atopic dermatosis. Also for keratosis e.g. actinic keratoses arising from sun-exposed or irradiated skin. For acne vulgaris, dermatitis, including eczematous dermatitis and actinic dermatitis, etc.

L12 ANSWER 128 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-138267 [200114] WPIX
DOC. NO. CPI: C2001-040767 [200114]

DOC. NO. NON-CPI: N2001-100643 [200114]
TITLE: Prosthetic device for implantation is surface coated with naturally secreted human extracellular matrix
DERWENT CLASS: A96; B04; B07; D22; P34
INVENTOR: NAUGHTON G K; ZELTINGER J
PATENT ASSIGNEE: (ADTI-N) ADVANCED TISSUE SCI INC
COUNTRY COUNT: 92

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001003750	A1	20010118	(200114)*	EN	69[2]		<--
AU 2000060722	A	20010130	(200127)	EN			<--
EP 1196206	A1	20020417	(200233)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001003750	A1	WO 2000-US18461	20000706
AU 2000060722	A	AU 2000-60722	20000706
EP 1196206	A1	EP 2000-947054	20000706
EP 1196206	A1	WO 2000-US18461	20000706

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000060722 A	Based on	WO 2001003750 A
EP 1196206 A1	Based on	WO 2001003750 A

PRIORITY APPLN. INFO: US 1999-350386 19990709
AN 2001-138267 [200114] WPIX
AB WO 2001003750 A1 UPAB: 20060116
NOVELTY - A prosthetic device suitable for implantations, or use in a human, is new. It is coated on at least one surface with a composition comprising a naturally secreted human extracellular matrix.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) producing a prosthetic device, comprising spraying the novel device with, or dipping the novel device in, a formulated naturally secreted human extracellular matrix to form a coating; and (2) filling in the sac of an aneurysm, comprising injecting a composition comprising naturally secreted human extracellular matrix at the site of the aneurysm. ACTIVITY - Vulnerary. No biological data is given.
MECHANISM OF ACTION - None given.
USE - As prosthetic devices suitable for implantation or use in humans, preferably as a stent, stent/graft, vascular graft, artificial heart, mechanical heart valve, annuloplasty ring, sewing ring, metal implant, especially a hip joint, cranial plate, orthodontic pin or orthopedic plate, pin or screw, suture material or adhesive or non-adhesive bandage. The compositions promote connective tissue deposition, angiogenesis, reepithialization and fibroplasia which are useful for promoting wound healing and tissue regeneration.

ADVANTAGE - The preparations are biodegradable and biocompatible, having longer persistence than collagen implants and contain only human protein. They have a reduced risk of immune response compared to bovine collagen.

L12 ANSWER 129 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-062618 [200108] WPIX
DOC. NO. CPI: C2001-017641 [200108]
DOC. NO. NON-CPI: N2001-046966 [200108]
TITLE: Joint construct prepared in vitro for use in replacing whole joints, comprising carrier material, cartilage tissue and bone tissue, preferably transfected with growth factor gene
DERWENT CLASS: B04; D16; D22; P32; P34
INVENTOR: FRIEDL H; KLEMT C; SCHAEFER D J; STARK G B
PATENT ASSIGNEE: (UNIV-N) UNIVERSITAETSKLINIKUM FREIBURG
COUNTRY COUNT: 89

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
DE 19926083	A1	20001214	(200108)*	DE	25[8]		<--
WO 2000074741	A2	20001214	(200108)	DE			<--
AU 2000056791	A	20001228	(200119)	EN			<--
EP 1242129	A2	20020925	(200271)	DE			<--
JP 2003510108	W	20030318	(200321)	JA	63		<--
EP 1242129	B1	20040121	(200410)	DE			
DE 50005104	G	20040226	(200418)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 19926083 A1		DE 1999-19926083	19990608
AU 2000056791 A		AU 2000-56791	20000608
DE 50005104 G		DE 2000-50005104	20000608
EP 1242129 A2		EP 2000-942031	20000608
EP 1242129 B1		EP 2000-942031	20000608
DE 50005104 G		EP 2000-942031	20000608
WO 2000074741 A2		WO 2000-EP5313	20000608
EP 1242129 A2		WO 2000-EP5313	20000608
JP 2003510108 W		WO 2000-EP5313	20000608
EP 1242129 B1		WO 2000-EP5313	20000608
DE 50005104 G		WO 2000-EP5313	20000608
JP 2003510108 W		JP 2001-501273	20000608

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 50005104 G	Based on	EP 1242129 A
AU 2000056791 A	Based on	WO 2000074741 A
EP 1242129 A2	Based on	WO 2000074741 A
JP 2003510108 W	Based on	WO 2000074741 A

EP 1242129 B1 Based on WO 2000074741 A
DE 50005104 G Based on WO 2000074741 A

PRIORITY APPLN. INFO: DE 1999-19926083 19990608
AN 2001-062618 [200108] WPIX
AB DE 19926083 A1 UPAB: 20060116
NOVELTY - A biological joint construct, at least partially prepared in vitro, comprising at least one biocompatible carrier material, cartilage tissue containing chondrocytes and/or chondroblasts and cartilage substance, and bone tissue containing osteocytes and/or osteoblasts and bone substance, is new. The cartilage and bone tissue are firmly bonded together.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a biological joint replacement, comprising at least two novel joint constructs;
(2) preparing the novel joint construct, comprising: (a) producing a bone component by covering carrier material with osteoblasts;
(b) preparing a cartilage component by preparing a suspension of chondrocytes in a medium or gel or by covering carrier material with chondrocytes;
(c) combining the two components, so that the carrier is integrated in the cartilage; and
(d) culturing the construct in vitro, so that biological crosslinking of the combined components takes place by stimulation of the cells for attachment and synthesis of tissue-specific extracellular matrix;
(3) preparing bone tissue, comprising: (a) isolating bone cells or bone precursor cells ;
(b) transfecting the cells by non-viral gene transfer with at least one gene encoding a growth factor; (c) covering a carrier material with the transfected cells ; and
(d) culturing the obtained construct in vitro; and (4) bone tissue obtained by the method of (2), and containing osteoblasts, transfected in vitro by non-viral gene transfer with at least one gene encoding a growth factor, and at least one carrier material.
USE - The constructs are useful in the replacement and reconstruction of defective joints. The transfected bone tissue is used in the production of the joint constructs. (All claimed).
ADVANTAGE - Complex joint structures, including complete joint replacements with bone, cartilage, capsule and band components, can be produced before the reconstruction. The transfected bone tissue provides improved covering of the carrier material during the in vitro phase and better ingrowth of tissue after implantation . It also induces production of new blood vessels after implantation.

L12 ANSWER 130 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-007308 [200101] WPIX
DOC. NO. CPI: C2001-001873 [200101]
DOC. NO. NON-CPI: N2001-005233 [200101]
TITLE: Preparing tubular tissue structures, useful for implantation, e.g. as heart valve prostheses, by growing cells on a scaffold then subjecting tissues to physiological loads
DERWENT CLASS: B04; D16; D22; P32; P34
INVENTOR: EASTWOOD M
PATENT ASSIGNEE: (UYWE-N) UNIV WESTMINSTER
COUNTRY COUNT: 22

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC

WO 2000067672	A2	20001116	(200101)*	EN	18[1]	<-- <--
AU 2000053943	A	20001121	(200112)	EN		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000067672	A2	WO 2000-EP4412	20000504
AU 2000053943	A	AU 2000-53943	20000504

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000053943	A	Based on	WO 2000067672 A

PRIORITY APPLN. INFO: GB 1999-10377 19990505
AN 2001-007308 [200101] WPIX
AB WO 2000067672 A2 UPAB: 20050524
NOVELTY - Preparation of a tubular structure (A) for surgical implantation.
DETAILED DESCRIPTION - Practically all cells are extracted from an appropriate host tissue sample; grown in culture, then used to inoculate a planar scaffold and culture continued. Once the cells have become established, the scaffold is removed from the tissue culture, the newly formed tissue is cut to shape and the edges joined and sealed to form a tube. This is subjected to physiological loads until the tissue has practically the same histological appearance and mechanical properties as its native counterpart.
USE - (A) are especially used as blood vessel and heart valve prostheses.
ADVANTAGE - (A) contain the same structural components (e.g. collagen, elastin and smooth muscle) as native structures.

L12 ANSWER 131 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-672494 [200065] WPIX
DOC. NO. CPI: C2000-203620 [200065]
DOC. NO. NON-CPI: N2000-498611 [200065]
TITLE: Mineralization and cellular patterning on biomaterial surfaces useful cell culture, cell transplantation, tissue engineering and guided tissue regeneration
DERWENT CLASS: A18; A23; A96; B04; D16; G06; P32; P34; P42
INVENTOR: DEARING M T; KOHN D H; MOONEY D J; MURPHY W L; PETERS M C; SPALDING G C
PATENT ASSIGNEE: (UNMI-C) UNIV MICHIGAN; (UNMT-C) UNIV MICHIGAN TECHNOLOGY
COUNTRY COUNT: 91

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2000056375	A2	20000928	(200065)*	EN	78[9]		<-- <--
AU 2000041730	A	20001009	(200103)	EN			<-- <--
EP 1163018	A2	20011219	(200206)	EN			<-- <--

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EP 1277482      A2 20030122 (200308)  EN                              <--
                                                                      <--
US 6541022      B1 20030401 (200324)  EN                              <--
EP 1163018      B1 20030528 (200336)  EN
DE 60003006     E  20030703 (200351)  DE
US 20030203002  A1 20031030 (200372)  EN
ES 2199815      T3 20040301 (200426)  ES
US 6767928      B1 20040727 (200449)  EN
US 20040228900  A1 20041118 (200477)  EN
US 20070059437  A1 20070315 (200722)  EN
US 20090226602  A1 20090910 (200960)  EN
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APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000056375	A2	WO 2000-US7207	20000317
US 6541022	B1 Provisional	US 1999-125118P	19990319
US 20030203002	A1 Provisional	US 1999-125118P	19990319
US 6767928	B1 Provisional	US 1999-125118P	19990319
US 20040228900	A1 Provisional	US 1999-125118P	19990319
US 20070059437	A1 Provisional	US 1999-125118P	19990319
US 6541022	B1 Provisional	US 1999-167289P	19991124
US 20030203002	A1 Provisional	US 1999-167289P	19991124
US 6767928	B1 Provisional	US 1999-167289P	19991124
US 20040228900	A1 Provisional	US 1999-167289P	19991124
US 20070059437	A1 Provisional	US 1999-167289P	19991124
AU 2000041730	A	AU 2000-41730	20000317
DE 60003006	E	DE 2000-60003006	20000317
EP 1163018	A2	EP 2000-921402	20000317
EP 1277482	A2 Div Ex	EP 2000-921402	20000317
EP 1163018	B1	EP 2000-921402	20000317
DE 60003006	E	EP 2000-921402	20000317
ES 2199815	T3	EP 2000-921402	20000317
US 6767928	B1	US 2000-527636	20000317
US 20040228900	A1 Div Ex	US 2000-527636	20000317
US 20070059437	A1 Div Ex	US 2000-527636	20000317
US 6541022	B1	US 2000-527638	20000317
US 20030203002	A1 Div Ex	US 2000-527638	20000317
EP 1163018	A2	WO 2000-US7207	20000317
EP 1163018	B1	WO 2000-US7207	20000317
DE 60003006	E	WO 2000-US7207	20000317
EP 1277482	A2	EP 2002-21562	20000317
US 20030203002	A1	US 2003-403250	20030331
US 20040228900	A1	US 2004-872199	20040618
US 20070059437	A1 Cont of	US 2004-872199	20040618
US 20070059437	A1	US 2006-441265	20060525
US 20090226602	A1 Provisional	US 1999-125118P	19990319
US 20090226602	A1 Provisional	US 1999-167289P	19991124
US 20090226602	A1 Div Ex	US 2000-527636	20000317
US 20090226602	A1 Cont of	US 2004-872199	20040618
US 20090226602	A1 Cont of	US 2006-441265	20060525
US 20090226602	A1	US 2009-433518	20090430

FILING DETAILS:

PATENT NO	KIND	PATENT NO	
EP 1277482	A2 Div ex	EP 1163018	A

DE 60003006	E	Based on	EP 1163018	A
ES 2199815	T3	Based on	EP 1163018	A
US 20030203002	A1	Div ex	US 6541022	B
US 20040228900	A1	Div ex	US 6767928	B
US 20070059437	A1	Div ex	US 6767928	B
AU 2000041730	A	Based on	WO 2000056375	A
EP 1163018	A2	Based on	WO 2000056375	A
EP 1163018	B1	Based on	WO 2000056375	A
DE 60003006	E	Based on	WO 2000056375	A
US 20090226602	A1	Div Ex	US 6767928	B

PRIORITY APPLN. INFO: US 1999-167289P 19991124
US 1999-125118P 19990319
US 2000-527636 20000317
US 2000-527638 20000317
US 2003-403250 20030331
US 2004-872199 20040618
US 2006-441265 20060525
US 2009-433518 20090430

AN 2000-672494 [200065] WPIX

AB WO 2000056375 A2 UPAB: 20060117

NOVELTY - Surface-modification of a biocompatible material comprising generating a patterned surface on a biocompatible material by irradiating a photosensitive surface of a biocompatible material with pre-patterned electromagnetic radiation, generating a pattern on the surface of the biocompatible material, is new.

DETAILED DESCRIPTION - Surface-modification of a biocompatible material comprising generating a patterned surface on a biocompatible material by irradiating a photosensitive surface of a biocompatible material with pre-patterned electromagnetic radiation, generating a pattern on the surface of the biocompatible material, is new. The method alternatively comprises generating an extended mineralized surface on a biocompatible material by functionalizing a surface of a biocompatible material and contacting the functionalized surface with a mineral-containing solution, generating extended mineralization on the surface of the biocompatible material. INDEPENDENT CLAIMS are also included for the following: (1) a surface-modified biocompatible material comprising a modified surface prepared by the novel method; (2) a cell culture device, and implantable biomedical device, comprising the material of (1); and (3) a method of culturing cells, comprising growing a cell population in contact with the material of (1).

USE - The surface-modified biocompatible material is useful in cell culture, cell transplantation, tissue engineering and guided tissue regeneration. The surface-modified biocompatible material is useful in a cell culture or implantable biomedical device. In particular, the surface-modified biocompatible material is useful for generating bone-like tissue and neovascularized or vascularized tissue. The patterned/mineralized biomaterials provide more control over ongoing biological processes, such as mineralization, growth factor release, cellular attachment and tissue growth. (All claimed).

ADVANTAGE - The biocompatible materials of the invention provide orthopedic scaffolds that combine the degradability, biocompatibility and osteoconductivity of mineralized scaffolds with the tissue inductive properties of bioactive polypeptides. Patterning provides an additional degree of control. The invention achieves the growth of bone-like mineral on the inner pore surfaces of a scaffold containing a growth factor without compromising factor bioactivity or scaffold porosity.

L12 ANSWER 132 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 2000-491028 [200043] WPIX
DOC. NO. CPI: C2000-147573 [200043]
DOC. NO. NON-CPI: N2000-364401 [200043]
TITLE: Compositions e.g. hyaluronic acid covalently bonded to activated polymeric substrates such as a polyolefin are used in cell-support materials for implantation contain acid group-containing biomolecules
DERWENT CLASS: A18; A28; A96; B04; D16; D22; P34
INVENTOR: PITT W G; PRESTWICH G D
PATENT ASSIGNEE: (UYYO-C) UNIV BRIGHAM YOUNG; (UTAH-C) UNIV UTAH RES FOUND
COUNTRY COUNT: 88

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2000041739	A1	20000720	(200043)*	EN	24[2]		<--
							<--
AU 2000024143	A	20000801	(200054)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000041739	A1	WO 2000-US1028	20000114
AU 2000024143	A	AU 2000-24143	20000114

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000024143	A	Based on	WO 2000041739 A

PRIORITY APPLN. INFO: US 1999-116021P 19990115
AN 2000-491028 [200043] WPIX
AB WO 2000041739 A1 UPAB: 20050411
NOVELTY - Compositions of matter comprising activated polymeric substrates with acid group-containing biomolecules covalently bonded via the acid group to the substrate.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) methods of making activated polymeric substrates with acid group-containing biomolecules; and
(2) cell-supporting materials comprising a polymeric substrate with an acid group-containing biomolecules covalently bonded via the acid group to the substrate, in which cells selectively attach to the acid group-containing biomolecules.
USE - The compositions are used in cell- supporting materials for implantation in animals including humans (claimed). They are used as supports for osteoblast growth for prosthetic hard tissue applications, support of endothelial cell growth for porous or non-porous vascular grafts, support of chondrocyte growth for prosthetic cartilages, or support of hippocampal cells for guided nerve regeneration. They may also be used as scaffolding in hard and soft tissue regeneration or as short-term implants (sutures, bone screws, etc). They are used to selectively recruit cells, such as endothelial cells, chondrocytes, platelets and neural cells.
ADVANTAGE - The compositions are prepared by methods that use vigorous conditions to activate the polymeric substrate's surface so that subsequent attachment of the acid group-containing biomolecules can be performed under

mild aqueous conditions. The biomolecules may be modified to include specific bioactive peptides that can mediate cell attachment e.g. YIGSR-, SIKVAV and RGD-containing polypeptides or other protein or GAG components of the extracellular matrix by chemical modification or absorption. The biomolecules is hydrophilic and non-cytotoxic. Selected biomolecules can create a lubricious surface that will exhibit minimal absorption/adhesion of undesired cells, proteins or bacteria. Naturally occurring biomolecules such as GAGs and their fragments and analogs are typically non-immunogenic and non-thrombogenic. The attachment of biomolecules to a flexible, non-biodegradable surface provides appropriate mechanical properties for it to function as a support for selective growth. The use of GAG polymer as the biomolecules supports and directs nerve growth as well as providing a new tool that allows percutaneous access to the milieu of a regenerating nerve.

L12 ANSWER 133 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-475134 [200041] WPIX
DOC. NO. NON-CPI: N2000-354494 [200041]
TITLE: Replacement of tooth missing from person's jawbone, by cutting part of of donor person's jawbone containing tooth implant and its root, then anchoring implant to blood-clotted hole on patient jawbone
DERWENT CLASS: P32
INVENTOR: FILHO N D S B
PATENT ASSIGNEE: (FILH-I) FILHO N D S B
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 6089867	A	20000718	(200041)*	EN	7[6]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6089867 A		US 1998-39415	19980316

PRIORITY APPLN. INFO: US 1998-39415 19980316
AN 2000-475134 [200041] WPIX
AB US 6089867 A UPAB: 20050411
NOVELTY - The method commences by excising a portion of e.g. a donor or deceased person's jawbone (4), which contains the tooth implant and its root. The implant is washed to remove all connected tisssues and is treated by lyophilization or sterilization process. The implant is inset into the receiving hole created on the patient's jawbone, after blood clotting is created in the hole.
DETAILED DESCRIPTION - A gap is left between the implant and the receiving hole to hold the blood clot. The blood clot ossifies the gap and aids in the growth of new bone tissue that attaches to the bone tissue portion on the tooth implant. An INDEPENDENT CLAIM is also included for a sterile lyophilized tooth implant making method.
USE - For replacing one or more teeth missing from jawbone of person.
ADVANTAGE - Ensures proper attachment of tooth implant on patient's jawbone, especially since implant contains natural root. Tooth implant can be derived from dead or living donor persons.

DESCRIPTION OF DRAWINGS - The figure shows the isometric view of a tooth implant.
Deceased person's jawbone (4)

L12 ANSWER 134 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-376080 [200032] WPIX
CROSS REFERENCE: 1999-204944; 2000-376081; 2000-376082; 2000-387127; 2000-399317; 2002-170534; 2002-227029
DOC. NO. CPI: C2000-113615 [200032]
DOC. NO. NON-CPI: N2000-282472 [200032]
TITLE: Implantable oxygen sensor has self-test light detector to detect tissue overgrowth
DERWENT CLASS: B07; P31; P34; S05
INVENTOR: MIESEL K A
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 21

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 2000025860	A1 20000511	(200032)*	EN	83[28]		<--
						<--
US 6125290	A 20000926	(200051)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000025860	A1	WO 1999-US24741	19991022
US 6125290	A	US 1998-182972	19981030

PRIORITY APPLN. INFO: US 1998-182972 19981030
AN 2000-376080 [200032] WPIX
CR 1999-204944; 2000-376081; 2000-376082; 2000-387127; 2000-399317; 2002-170534; 2002-227029
AB WO 2000025860 A1 UPAB: 20060116
NOVELTY - Sensor has light emitters (192,194) in a first portion of a housing and a light detector (195) in a second portion. Light transmissive lenses (158,160) are disposed over the emitter and detector. A second, self-test light detector (183) is disposed in the first portion of the housing near the light emitters.
DETAILED DESCRIPTION - The sensor is used to monitor the oxygen content of a mass of blood (167). The second self-test light detector may be a photosensor or photodiode. It detects light reflected from tissue overgrowth (197) disposed over the lens. The self-test light detector provides an output signal for calibrating or adjusting the output signal from the light detector (195) to compensate or adjust for the degree of tissue overgrowth. At a predetermined degree of tissue overgrowth, oxygen saturation data generated in response to signals provided by the first light detector (195) is ignored or assigned less weight or reliability by a microprocessor.
USE - The sensor assembly forms part of a lead positioned in the heart of a patient. The lead is attached to an implantable medical device (IMD) for cardiac monitoring or for delivering therapy. The IMD may be a heart monitor, therapy delivery device, pacemaker, implantable pulse generator, pacer-cardiodefibrillator, implantable cardiodefibrillator, cardiomyo-stimulator, nerve stimulator, gastric stimulator, brain stimulator or drug delivery device.

ADVANTAGE - The sensor housing size is small and eliminates undesirable backscatter or internal reflection or refraction of light beams into the detector. Tissue overgrowth is detected and compensation made for it.
DESCRIPTION OF DRAWINGS - The figure shows a cross-sectional view of the oxygen sensor having an overgrowth of tissue. lenses (158,160)
blood mass (167)
self-test light detector (183) light emitters (192,194)
light detector (195)
tissue overgrowth (197)

Member(0002)
ABEQ US 6125290 A UPAB 20060116
NOVELTY - Sensor has light emitters (192,194) in a first portion of a housing and a light detector (195) in a second portion. Light transmissive lenses (158,160) are disposed over the emitter and detector. A second, self-test light detector (183) is disposed in the first portion of the housing near the light emitters.

DETAILED DESCRIPTION - The sensor is used to monitor the oxygen content of a mass of blood (167). The second self-test light detector may be a photosensor or photodiode. It detects light reflected from tissue overgrowth (197) disposed over the lens. The self-test light detector provides an output signal for calibrating or adjusting the output signal from the light detector (195) to compensate or adjust for the degree of tissue overgrowth. At a predetermined degree of tissue overgrowth, oxygen saturation data generated in response to signals provided by the first light detector (195) is ignored or assigned less weight or reliability by a microprocessor.

USE - The sensor assembly forms part of a lead positioned in the heart of a patient. The lead is attached to an implantable medical device (IMD) for cardiac monitoring or for delivering therapy. The IMD may be a heart monitor, therapy delivery device, pacemaker, implantable pulse generator, pacer-cardiodefibrillator, implantable cardiodefibrillator, cardiomyo-stimulator, nerve stimulator, gastric stimulator, brain stimulator or drug delivery device.

ADVANTAGE - The sensor housing size is small and eliminates undesirable backscatter or internal reflection or refraction of light beams into the detector. Tissue overgrowth is detected and compensation made for it.

DESCRIPTION OF DRAWINGS - The figure shows a cross-sectional view of the oxygen sensor having an overgrowth of tissue.
lenses (158,160)
blood mass (167)
self-test light detector (183)
light emitters (192,194)
light detector (195)
tissue overgrowth (197)

L12 ANSWER 135 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-375835 [200032] WPIX
CROSS REFERENCE: 2002-188224
DOC. NO. CPI: C2000-113501 [200032]
DOC. NO. NON-CPI: N2000-282294 [200032]
TITLE: Making textured or porous silicone rubber, useful for making e.g. biomedical devices, culture chambers, microtitre plates, substrates for skin grafts and drug delivery systems

DERWENT CLASS: A26; A96; B07; C07; D16; D22; P32; P34
INVENTOR: BIRD R; BIRD R M; CLAYSON T; CLIFFORD T; CLIFFORD T B; FULLER J; FULLER J P; PEGG D; BIRD M; CLIFFORD B; FULLER P
PATENT ASSIGNEE: (ASHB-N) ASHBY SCI LTD; (CELL-N) CELLON SA
COUNTRY COUNT: 86

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2000024437	A2	20000504	(200032)*	EN	52[15]		<--
							<--
AU 9963589	A	20000515	(200039)	EN			<--
							<--
EP 1124592	A2	20010822	(200149)	EN			<--
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JP 2002528567	W	20020903	(200273)	JA	61		<--
AU 768737	B	20040108	(200412)	EN			
US 6900055	B1	20050531	(200536)	EN			
EP 1124592	B1	20060607	(200641)	EN			
DE 69931800	E	20060720	(200652)	DE			
DE 69931800	T2	20070712	(200746)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000024437	A2	WO	1999-GB3558 19991028
AU 9963589	A	AU	1999-63589 19991028
AU 768737	B	AU	1999-63589 19991028
DE 69931800	E	DE	1999-631800 19991028
EP 1124592	A2	EP	1999-951010 19991028
EP 1124592	B1	EP	1999-951010 19991028
DE 69931800	E	EP	1999-951010 19991028
EP 1124592	A2	WO	1999-GB3558 19991028
JP 2002528567	W	WO	1999-GB3558 19991028
US 6900055	B1	WO	1999-GB3558 19991028
EP 1124592	B1	WO	1999-GB3558 19991028
DE 69931800	E	WO	1999-GB3558 19991028
JP 2002528567	W	JP	2000-578042 19991028
US 6900055	B1	US	2001-830592 20010813
DE 69931800	T2	DE	1999-631800 19991028
DE 69931800	T2	EP	1999-951010 19991028
DE 69931800	T2	WO	1999-GB3558 19991028

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 768737	B	Previous Publ	AU 9963589	A
DE 69931800	E	Based on	EP 1124592	A
AU 9963589	A	Based on	WO 2000024437	A
EP 1124592	A2	Based on	WO 2000024437	A
JP 2002528567	W	Based on	WO 2000024437	A
AU 768737	B	Based on	WO 2000024437	A
US 6900055	B1	Based on	WO 2000024437	A
EP 1124592	B1	Based on	WO 2000024437	A
DE 69931800	E	Based on	WO 2000024437	A

DE 69931800	T2	Based on	EP 1124592	A
DE 69931800	T2	Based on	WO 2000024437	A

PRIORITY APPLN. INFO: GB 1999-12641 19990528
GB 1998-23446 19981028
AN 2000-375835 [200032] WPIX
CR 2002-188224
AB WO 200002443 7 A2 UPAB: 20060116
NOVELTY - Making a silicone rubber having a structure adapted for growth of cells or living tissue comprising mixing a silicone rubber precursor with a sacrificial filler, curing the mixture and removing the filler to form a structured silicone rubber, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(i) a textured or porous silicone rubber obtained by the novel method;
(ii) a biomedical device comprising textured or porous silicone rubber;
(iii) a culture chamber comprising a gas-permeable wall and a textured interior;
(iv) a method of culturing microbiological materials in the novel culture chamber;
(v) a well for use in a method of culturing microbiological material having a gas-permeable wall and an interior surface textured; (vi) a microtitre plate including the novel wells; (vii) an implant device comprising a cell support structure coated with a textured surface; (viii) a substrate for in vitro growth of skin grafts comprising a flexible membrane having a textured surface; (ix) a tissue support structure for use in culturing tissue or cellular agglomerates;
(x) an artificial implant formed from material having an internal system of pores promoting cell attachment and oxygen supply;
(xi) a cell implant means comprising a porous material;
(xii) a drug delivery system comprising a porous material which is impregnated with the drug;
(xiii) a filtration medium comprising porous silicone rubber; (xiv) a cell cryopreservation system comprising porous material for absorbing cell culture and a container for storage in liquid nitrogen;
(xv) an electrode comprising a porous material including electrically conductive particles;
(xvi) a wound dressing comprising a porous gel layer and a carrier gel; and
(xvii) a clinical swab comprising a porous material.
USE - The method is useful for making silicone rubber which may be porous and with a surface which may be modified to improved adhesion of cells or tissue and which is useful for making biomedical devices, culture chambers, microtitre plates, implant devices, substrates for skin grafts, drug delivery systems, filtration media, cell cryopreservation systems, electrodes, wound dressings and swabs. The electrode can be used to treat sewage (claimed).

L12 ANSWER 136 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-224141 [200019] WPIX
DOC. NO. CPI: C2000-068322 [200019]
DOC. NO. NON-CPI: N2000-168031 [200019]
TITLE: Corneal onlay for synthetic epikeratoplasty or as an implanted contact lens, has a topography comprising surface indentations
DERWENT CLASS: A96; D22; P32; P34
INVENTOR: DALTON A; DALTON B A; EVANS D; EVANS M D M; FITTON H; FITTON J H; GIPSON I K; GIPSON K; JOHNSON G; MACREA EVANS M D; STEELE G; STEELE J G
PATENT ASSIGNEE: (CSIR-C) COMMONWEALTH SCI & IND RES ORG; (NOVS-C) NOVARTIS AG; (NOVS-C) NOVARTIS-ERFINDUNGEN VERW GES MBH;

(DALT-I) DALTON B A; (FITT-I) FITTON J H; (GIPS-I) GIPSON I K; (JOHN-I) JOHNSON G; (EVAN-I) MACREA EVANS M D; (STEE-I) STEELE J G; (CSIR-C) COMMONWEALTH SCI&IND RES ORG

COUNTRY COUNT: 87

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2000009042	A1	20000224	(200019)*	EN	17[0]		<--
							<--
AU 9957326	A	20000306	(200030)	EN			<--
							<--
NO 2001000694	A	20010316	(200130)	NO			<--
							<--
EP 1105070	A1	20010613	(200134)	EN			<--
							<--
US 20010047203	A1	20011129	(200202)	EN			<--
							<--
JP 2002522156	W	20020723	(200263)	JA	19		<--
							<--
US 6454800	B2	20020924	(200266)	EN			<--
							<--
TW 485044	A	20020501	(200318)	ZH			<--
EP 1105070	B1	20040526	(200435)	EN			
DE 69917651	E	20040701	(200443)	DE			
ES 2220111	T3	20041201	(200480)	ES			
DE 69917651	T2	20050630	(200543)	DE			
CA 2338033	C	20080729	(200853)	EN			
JP 4282905	B2	20090624	(200942)	JA	9		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000009042	A1	WO 1999-EP5836	19990810
AU 9957326	A	AU 1999-57326	19990810
CA 2338033	C	CA 1999-2338033	19990810
DE 69917651	E	DE 1999-69917651	19990810
DE 69917651	T2	DE 1999-69917651	19990810
EP 1105070	A1	EP 1999-944362	19990810
EP 1105070	B1	EP 1999-944362	19990810
DE 69917651	E	EP 1999-944362	19990810
ES 2220111	T3	EP 1999-944362	19990810
DE 69917651	T2	EP 1999-944362	19990810
NO 2001000694	A	WO 1999-EP5836	19990810
EP 1105070	A1	WO 1999-EP5836	19990810
US 20010047203	A1 Cont of	WO 1999-EP5836	19990810
JP 2002522156	W	WO 1999-EP5836	19990810
US 6454800	B2 Cont of	WO 1999-EP5836	19990810
EP 1105070	B1	WO 1999-EP5836	19990810
DE 69917651	E	WO 1999-EP5836	19990810
DE 69917651	T2	WO 1999-EP5836	19990810
CA 2338033	C	WO 1999-EP5836	19990810
TW 485044	A	TW 1999-114710	19990827
JP 2002522156	W	JP 2000-564547	19990810
NO 2001000694	A	NO 2001-694	20010209
US 20010047203	A1	US 2001-782346	20010212

US 6454800 B2 US 2001-782346 20010212
JP 4282905 B2 PCT Application WO 1999-EP5836 19990810
JP 4282905 B2 JP 2000-564547 19990810

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 69917651	E	Based on	EP 1105070	A
ES 2220111	T3	Based on	EP 1105070	A
DE 69917651	T2	Based on	EP 1105070	A
AU 9957326	A	Based on	WO 2000009042	A
EP 1105070	A1	Based on	WO 2000009042	A
JP 2002522156	W	Based on	WO 2000009042	A
EP 1105070	B1	Based on	WO 2000009042	A
DE 69917651	E	Based on	WO 2000009042	A
DE 69917651	T2	Based on	WO 2000009042	A
CA 2338033	C	Based on	WO 2000009042	A
JP 4282905	B2	Previous Publ	JP 2002522156	W
JP 4282905	B2	Based on	WO 2000009042	A

PRIORITY APPLN. INFO: EP 1998-115161 19980812
AN 2000-224141 [200019] WPIX
AB WO 2000009042 A1 UPAB: 20060116
NOVELTY - A corneal onlay or corneal implant to be placed within or onto the surface of the cornea has a surface topography comprising indentation. It is biocompatible, optically transparent, synthetic and biostable polymeric material. This material comprises surface that supports the attachment and growth of tissue cells.
USE - The corneal onlay is used as a synthetic epikeratoplasty or as an implanted contact lens.
ADVANTAGE - The invention provides a polymer surface that inherently supports tissue overgrowth without the need for an additional surface modification or biological coating. It also provides a polymer that combines this property with good biostability, optical properties, and mechanical properties that make the material suitable for the fabrication of epikeratoprostheses.

L12 ANSWER 137 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-061977 [200005] WPIX
DOC. NO. CPI: C2000-017104 [200005]
DOC. NO. NON-CPI: N2000-048569 [200005]
TITLE: Capturing and promoting or blocking the activity of endogenous bioactive molecules in mammals
DERWENT CLASS: B04; D16; D22; P34; S03
INVENTOR: FITCHMUN M
PATENT ASSIGNEE: (DESM-N) DESMOS INC
COUNTRY COUNT: 84

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9953955	A1	19991028	(200005)*	EN	35[1]		<--
							<--
AU 9935722	A	19991108	(200014)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9953955 A1		WO 1999-US8763	19990421
AU 9935722 A		AU 1999-35722	19990421

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9935722 A	Based on	WO 9953955 A

PRIORITY APPLN. INFO: US 1998-82685P 19980422
AN 2000-061977 [200005] WPIX
AB WO 1999053955 A1 UPAB: 20050705
NOVELTY - A method for capturing and promoting or blocking the activity of one or more endogenous bioactive molecules in a mammal, comprises applying at least 1 protein with an affinity for the endogenous bioactive molecules to an article and placing the article in contact with the mammal.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a method for providing a bioactive coating on an article, comprising:
(a) providing an article with specific binding molecules specific to a bioactive molecule attached to it; and (b) placing the article into an environment that includes the bioactive molecule and allowing the bioactive molecule to bind to the specific binding;
(2) a method for targeting a bioactive molecule to an implanted article, comprising:
(a) implanting an article in a vertebrate in vivo, the article having a specific binding molecule attached to it; and (b) administering a bioactive molecule to the vertebrate, where the specific binding molecule is specific to the bioactive molecule, the specific binding molecule will bind to the bioactive molecule to the article;
(3) a medical device with a biocoating, where the biocoating comprises a specific binding molecule attached to the device, the specific binding molecule having specificity for a bioactive molecule; and the bioactive molecule, which is bound by the specific binding molecule; and
(4) a method for identifying a novel agent having a particular biological activity, or a known agent having a new biological activity, comprising:
(a) generating monoclonal antibodies against a sample containing the agent;
(b) contacting the antibodies with the sample, so the antibody binds the agent;
(c) assaying the bound agent for a desired biological activity; and (d) determining the identity of the agent.
USE - The method is used to capture, promote or block the activity of endogenous bioactive molecules in mammals.

L12 ANSWER 138 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-039102 [200003] WPIX
DOC. NO. CPI: C2000-010163 [200003]
TITLE: New compositions comprising nucleic acid in association with a polymer matrix, used for nucleic acid delivery
DERWENT CLASS: A96; B04; D16
INVENTOR: BONADIO J; MOONEY D J; SHEA L D
PATENT ASSIGNEE: (UNMI-C) UNIV MICHIGAN
COUNTRY COUNT: 81

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9958656	A2	19991118	(200003)*	EN	143[6]		<--
							<--
AU 9938986	A	19991129	(200018)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9958656	A2	WO 1999-US10330	19990512
AU 9938986	A	AU 1999-38986	19990512

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9938986	A	Based on	WO 9958656 A

PRIORITY APPLN. INFO: US 1998-109054P 19981119
US 1998-85305P 19980513

AN 2000-039102 [200003] WPIX

AB WO 1999058656 A2 UPAB: 20050409

NOVELTY - New compositions comprise a nucleic acid (NA) in association with a polymer matrix (PM) formed by gas foaming and leaching or an alginate or modified alginate matrix (AM).

DETAILED DESCRIPTION - (A) A novel composition comprises at least a first NA segment in association with a structural matrix (SM), where: (a) at least a portion of the SM is comprised of a porous polymer (PP) that contains pores formed by gas foaming and pores formed by leaching out of a particulate from the polymer; or (b) at least a portion of the SM is an alginate or modified AM.

INDEPENDENT CLAIMS are also included for the following: (1) a gene transfer kit comprising a gene-matrix composition as in (A) in at least a first container;

(2) making a SM-NA composition comprising providing at least a first NA segment to a SM, where at least a portion of the SM is comprised of PP as in (A);

(3) controlled release of NAs comprising allowing the release of at least a first NA segment from a NA-SM composition that comprise at least a first NA segment in association with a structural alginate or modified AM or a SM that comprises at least a portion fabricated from PP as in (A);

(4) providing at least a first NA segment to a cell comprising contacting the cell with a NA-SM composition to release at least a first NA segment as in (3); (5) expressing at least a first NA segment in a cell comprising contacting the cell with a NA-SM composition to express at least a first NA segment as in (3); (6) culturing cells comprising growing cells in contact with a therapeutic gene-SM composition, where the therapeutic gene-SM composition comprises at least a first therapeutic gene in association with a structural alginate or modified AM or a SM that comprises at least a portion comprised of PP as in (A); (7) expressing at least a first NA segment in cells within a tissue site of an animal comprising contacting the tissue site with a NA-SM composition to express at least a first NA segment in cells within the tissue site, where the NA-SM composition comprises at least a first NA segment as in (3), or a SM that comprises as in (3);

(8) stimulating bone progenitor cells located within a bone progenitor tissue site of an animal, comprising contacting the tissue site with an osteotropic gene-SM composition to express at least a first osteotropic gene in the cells, where the osteotropic gene-SM composition comprises at least a first

osteotropic gene in association with a structural alginate or modified AM or SM as in (3); (9) stimulating fibroblasts within a wound tissue site of an animal comprising contacting the tissue site with a therapeutic gene-SM composition to express at least a first therapeutic gene in the fibroblasts, where the therapeutic gene-SM composition comprises at least a first therapeutic gene in association with a structural alginate or modified AM or SM as in (3); (10) promoting wound healing by applying a biocompatible SM containing a therapeutic gene expression construct to a wound site in an animal, so that repair cells that migrate to the wound site infiltrate the matrix, acquire a therapeutic gene expression construct, and express the encoded gene product encoded in vivo, to promote wound healing, where the biocompatible SM containing a therapeutic gene expression construct comprises at least a first therapeutic gene expression construct in association with a structural alginate or modified AM or SM as in (3);
(11) generating at least a first immune response in an animal by contacting a tissue site of an animal with an immunogenic gene-SM composition to express at least a first immunogenic gene in antigen presenting cells (APCs) that migrate into the tissue site, to cause the APCs to stimulate an antigenic or immunogenic response in the animal, where the immunogenic gene-SM composition comprises at least a first immunogenic gene in association with a structural alginate or modified AM or SM as in (3);
(12) treating diseased cells in an animal comprising contacting a tissue site of an animal with a cytotoxic gene-SM composition to express at least a first cytotoxic gene in diseased cells within the tissue site, where the cytotoxic gene-SM composition comprises at least a first cytotoxic gene in association with a structural alginate or modified AM or SM as in (3);
(13) transplanting cells into an animal by applying to a tissue site of an animal a cell-therapeutic gene-SM combination, where the cell-therapeutic gene-SM matrix combination comprises a population of cells and at least a first therapeutic gene in association with a structural alginate or modified AM or SM as in (3); (14) tissue engineering in an animal by contacting a tissue site of an animal with a therapeutic gene-SM composition to both express at least a first therapeutic gene in cells within the tissue site and to provide a matrix for tissue growth, where the therapeutic gene-SM composition comprises at least a first therapeutic gene in association with a structural alginate or modified AM or SM as in (3), and
(15) guided tissue regeneration in an animal comprising contacting a regenerating tissue site of an animal with a therapeutic gene-SM composition to both express at least a first therapeutic gene in cells within the regenerating tissue site and to provide a matrix for tissue regeneration, where the therapeutic gene-SM composition comprises at least a first therapeutic gene in association with SM as in (3), where the first matrix portion is integrally connected to a second matrix portion comprised of an impermeable polymer.
USE - The compositions and methods can be used for in vivo cell transfection, gene expression and gene therapy. They can be used for e.g. stimulating bone tissue growth, promoting wound healing, tissue regeneration and organ regeneration, generating immune responses, killing aberrant, malignant and virally-infected cells, and in cell transplantation, tissue engineering and guided tissue regeneration. The
products can also be used in in vitro culture methods.
ADVANTAGE - The porosity and physical properties of the compositions are controllable, allowing the number and type of cell populations that are exposed to the DNA to be regulated. They can provide prolonged release of NA, allowing cell exposure to NA for extended time periods.

L12 ANSWER 139 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-540487 [199945] WPIX

DOC. NO. CPI: C1999-157796 [199945]
DOC. NO. NON-CPI: N1999-400626 [199945]
TITLE: Augmentation or restoration of mammalian tissue by injecting solution of peptide polymer, used for soft or hard tissue reconstruction, especially of intervertebral disks
DERWENT CLASS: B04; D22; P32
INVENTOR: GLAZER P A; PARKER T M; URRY D W
PATENT ASSIGNEE: (BIOE-N) BIOELASTICS RES LTD; (URRY-I) URRY D W
COUNTRY COUNT: 83

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9943271	A1	19990902	(199945)*	EN	132[10]		<--
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AU 9927985	A	19990915	(200004)	EN			<--
							<--
EP 1056413	A1	20001206	(200064)	EN			<--
							<--
JP 2002507437	W	20020312	(200220)	JA	147		<--
							<--
US 20020038150	A1	20020328	(200225)	EN			<--
							<--
US 20020116069	A1	20020822	(200258)	EN			<--
							<--
US 6533819	B1	20030318	(200322)	EN			<--
US 6699294	B2	20040302	(200417)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9943271	A1	WO 1999-US4440	19990226
US 20020038150	A1 Provisional	US 1998-76297P	19980227
US 20020116069	A1 Provisional	US 1998-76297P	19980227
US 6533819	B1 Provisional	US 1998-76297P	19980227
US 6699294	B2 Provisional	US 1998-76297P	19980227
US 20020038150	A1 Provisional	US 1998-87155P	19980529
US 20020116069	A1 Provisional	US 1998-87155P	19980529
US 6533819	B1 Provisional	US 1998-87155P	19980529
US 6699294	B2 Provisional	US 1998-87155P	19980529
AU 9927985	A	AU 1999-27985	19990226
EP 1056413	A1	EP 1999-908590	19990226
US 20020038150	A1 Div Ex	US 1999-258723	19990226
US 20020116069	A1 Cont of	US 1999-258723	19990226
US 6533819	B1 Cont of	US 1999-258723	19990226
US 6699294	B2 Div Ex	US 1999-258723	19990226
EP 1056413	A1	WO 1999-US4440	19990226
JP 2002507437	W	WO 1999-US4440	19990226
JP 2002507437	W	JP 2000-533072	19990226
US 20020038150	A1	US 2001-837969	20010418
US 6699294	B2	US 2001-837969	20010418
US 20020116069	A1	US 2001-841321	20010423
US 6533819	B1	US 2001-841334	20010423

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9927985 A	Based on	WO 9943271 A
EP 1056413 A1	Based on	WO 9943271 A
JP 2002507437 W	Based on	WO 9943271 A

PRIORITY APPLN. INFO: US 1998-87155P 19980529
US 1998-76297P 19980227
US 1999-258723 19990226
US 2001-837969 20010418
US 2001-841321 20010423
US 2001-841334 20010423

AN 1999-540487 [199945] WPIX

AB WO 1999043271 A1 UPAB: 20050705
NOVELTY - Tissue augmentation/restoration in mammal is by injection at tissue site of aqueous polymer (I) solution at coacervate concentration in water absence. (I) has repeated monomer units (MU) of nona, penta or tetra-peptides. MU form series of beta-turns separated by suspended dynamic bridging segments. The inverse transition temperature (Tt) of (I) is less than injection site tissue temperature (Ts).
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) kits for tissue augmentation comprising a syringe (in a sterile wrapper) containing (I); and
(2) protein-based polymers for use as (I), having any one of about 30 sequences given in the specification (of 30 to 2003 amino acids). ACTIVITY - Antitumor; contraceptive.
MECHANISM OF ACTION - None given.
USE - (I) is injected at periurethral or subdermal sites (for treatment of urinary incontinence or for cosmetic purposes), or into hard or soft tissue, e.g. for repair of traumatic injury. A specific application is restoration of intervertebral disks (IVD). (I) the composition for injection may also be used for delivery of cells ; to block tumor-associated blood vessels; in tumor therapy and for contraceptive/infertility treatments (not claimed).
ADVANTAGE - (I) can be implanted under a variety of surgical conditions; is easily matched to the compliance of particular tissues; is biologically inert (or degrades to harmless products); can serve as carrier for active agents; is sterilizable; and is not significantly immunogenic or antigenic. It may be designed to stimulate cell adhesion or growth. Unlike collagen, solutions of (I) do not require additional water (avoiding problems of shrinkage) and do not promote formation of scar tissue, Since (I) have a well-defined structure, they can be made with selected physical properties and when injected provide long-lasting tissue augmentation.

L12 ANSWER 140 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-539576 [199945] WPIX
CROSS REFERENCE: 1997-479506; 2003-584339; 2004-356208; 2004-707224; 2007-750282
DOC. NO. CPI: C1999-157613 [199945]
TITLE: Cell cultures utilizing stable macroscopic membranes formed by the self-assembly of amphiphilic peptides
DERWENT CLASS: B04; D16
INVENTOR: DIPERSIO C M; HOLMES T; LOCKSHIN C; RICH A; ZHANG S
PATENT ASSIGNEE: (MASI-C) MASSACHUSETTS INST TECHNOLOGY
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 5955343	A	19990921	(199945)*	EN	49[25]	<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5955343 A	CIP of	US 1992-973326	19921228
US 5955343 A		US 1994-293284	19940822

PRIORITY APPLN. INFO: US 1994-293284 19940822
US 1992-973326 19921228

AN 1999-539576 [199945] WPIX
CR 1997-479506; 2003-584339; 2004-356208; 2004-707224; 2007-750282
AB US 5955343 A UPAB: 20050705
NOVELTY - An in vitro method (X) for culturing cells utilizing stable macroscopic membranes formed by the self-assembly of amphiphilic peptides (i.e. peptides with alternating hydrophilic and hydrophobic residues), is new.
DETAILED DESCRIPTION - An in vitro method (X) for culturing cells comprising:
(i) adding a macroscopic membrane (which is formed by the self-assembly of amphiphilic peptides (i.e. peptides with alternating hydrophilic and hydrophobic residues that are 12 or more residues in length and are complementary and structurally compatible) in an aqueous solution containing monovalent metal cations) to a cell culture to form a membrane/culture mixture; and (ii) maintaining the culture under conditions suitable for cell growth.
USE - The method may be used to produce membranes comprising cultured cells which may be useful in a wide variety of medical, research, industrial and biomaterial applications such as slow-diffusion drug delivery systems, artificial skin and separation matrices. The membranes may be used to support in vitro cell attachment and growth and for supporting artificial tissue (e.g. for in vivo use as implants). They are particularly useful as experimental model for Alzheimer's disease and scrapie infection (the salt-induced assembly of the peptides into insoluble and protease-resistant protein filaments with a beta-sheet secondary structure is similar to the formation of neurofibrillary filaments and amyloid plaques associated with Alzheimer's and the formation of scrapie prion protein filaments) and so may be used in disease modeling experiments and to assay for agents which modulate the disease processes. Additionally, they may be used in this way to study liver cirrhosis, kidney amyloidosis and other protein conformational diseases.
ADVANTAGE - The membrane in the membrane/ cell mixture produced in (X):
(i) supports cellular attachment and growth;
(ii) self-assembles to form large, macroscopic membranes that are insoluble and stable in aqueous solutions, serum and ethanol; (iii) is highly resistant to heat, alkaline/acidic pHs (i.e. it is stable from pH 1.5 to 11), chemical denaturants (e.g. guanidine-HCl and urea) and proteolytic digestion (e.g. by trypsin and alpha-chymotrypsin;
(iv) is non-cytotoxic and non-immunogenic; (v) is visible to the naked eye if dyed (e.g. with Congo Red) but is otherwise transparent;
(vi) may form thin, permeable, high density sheets or fibril like structures with simple structures, high tensile strength and a porous structure;
(vii) may be metabolized by humans and animals; (viii) is inexpensive to produce; and (ix) can be produced and stored in sterile conditions.

L12 ANSWER 141 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-527254 [199944] WPIX
DOC. NO. CPI: C1999-154823 [199944]

DOC. NO. NON-CPI: N1999-390560 [199944]
TITLE: Increasing amounts of regulatory proteins in tissue constructs through cryopreservation and thawing, useful for wound healing and repair and regeneration of other tissue defects
DERWENT CLASS: A32; A96; A97; B04; D16; P34
INVENTOR: LIU K; MANSBRIDGE J N
PATENT ASSIGNEE: (ADTI-N) ADVANCED TISSUE SCI INC
COUNTRY COUNT: 82

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 9938952	A2 19990805	(199944)*	EN	68[15]		<--
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AU 9925695	A 19990816	(200002)	EN			<--
						<--
US 6291240	B1 20010918	(200157)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9938952 A2		WO 1999-US2006	19990129
US 6291240 B1	Provisional	US 1998-72945P	19980129
US 6291240 B1		US 1998-137567	19980821
AU 9925695 A		AU 1999-25695	19990129

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9925695 A	Based on	WO 9938952 A

PRIORITY APPLN. INFO: US 1998-137567 19980821
US 1998-72945P 19980129

AN 1999-527254 [199944] WPIX
AB WO 1999038952 A2 UPAB: 20060115
NOVELTY - Subjecting a tissue construct to cryopreservation and subsequent thawing to increase the amount of regulatory proteins is new.
DETAILED DESCRIPTION - A tissue construct prepared in vitro comprising cells attached to a substrate, subjected to cryopreservation and subsequent thawing has an increased amount of at least one regulatory protein relative to constructs that are not subjected to cryopreservation and thawing.
INDEPENDENT CLAIMS are also included for the following: (1) a three-dimensional (3-D) tissue construct prepared in vitro comprising a living stromal matrix comprising stromal cells and connective tissue proteins naturally secreted by the stromal cells attached to and enveloping a framework composed of a biocompatible, non-living material formed into a 3-D structure, having been subjected to cryopreservation and subsequent thawing has an increased amount of at least one regulatory protein relative to constructs that are not subjected to cryopreservation and thawing; (2) inducing the production of at least one regulatory protein in cells in vitro, especially on a 3-D tissue construct; and (3) methods for culturing parenchymal cells in vitro. ACTIVITY - Vulnerary; Proliferative; Differentiation.
MECHANISM OF ACTION - Tissue implant.
USE - The tissue constructs, especially 3-D constructs, are useful for implantation in vivo. The constructs are used to promote wound healing and to

promote repair or regeneration of tissue damage, of e.g. skin, cartilage, bone and vascular tissue. The constructs and methods can also be used to enhance the culture and/or differentiation of cells and tissue in vitro. All claimed. DESCRIPTION OF DRAWINGS - Induction of PDGF A chain mRNA expression in 3-D dermal tissue constructs after cryopreservation and thawing relative to levels in fresh non-cryopreserved, tissue constructs.

L12 ANSWER 142 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-508171 [199942] WPIX
CROSS REFERENCE: 1996-097626; 2002-171698; 2003-553676; 2004-118877; 2007-571015
DOC. NO. CPI: C1999-148355 [199942]
TITLE: Polynucleotides encoding growth factor polypeptides useful for enhancing the repair of connective tissue and support tissue
DERWENT CLASS: B04; D16
INVENTOR: ADAMS M D; LI H
PATENT ASSIGNEE: (ADAM-I) ADAMS M D; (LIHH-I) LI H
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 5945300	A	19990831	(199942)*	EN	20[3]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5945300 A	CIP of	WO 1994-US7736	19940712
US 5945300 A		US 1995-459101	19950602

PRIORITY APPLN. INFO: US 1995-459101 19950602
WO 1994-US7736 19940712
AN 1999-508171 [199942] WPIX
CR 1996-097626; 2002-171698; 2003-553676; 2004-118877; 2007-571015
AB US 5945300 A UPAB: 20050705
NOVELTY - Isolated polynucleotides comprising nucleic acids encoding residues -24 to 351 (I), -23 to 351 (II) or 1 to 351 (III) of a 375 amino acid sequence (connective tissue growth factor-2 (CTGF-2), encoded by 1128 bp (ATCC 75804)), and their complements, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) a vector comprising the DNA sequence (I), (II), or (III); (2) a recombinant host cell comprising the vector of (1); (3) a polynucleotide comprising the DNA of (I), (II) or (III) linked to a heterologous regulatory sequence which controls gene expression;
(4) a process of producing a polypeptide from the host cell of (2); and
(5) the polypeptides encoded by (I), (II), and (III). ACTIVITY - Antiseborrheic; Dermatological; Vulnerary.
MECHANISM OF ACTION - Growth factor.
USE - The CTGF-2 polypeptides may be used to enhance the repair of connective tissue and support tissue and can therefore treat skin disorders e.g. acne, aging, UV damage or burns. CTGF-2 may also be used to promote the attachment, fixation and stabilization of tissue implants.

L12 ANSWER 143 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 1999-418916 [199935] WPIX
DOC. NO. CPI: C1999-123157 [199935]
TITLE: Composition comprising intact basement membrane of follicle tissue, useful for supporting growth and differentiation of in vitro cells
DERWENT CLASS: B04; D16
INVENTOR: ASEM E K; ROBINSON J P; TUREK J J
PATENT ASSIGNEE: (PURD-C) PURDUE RES FOUND
COUNTRY COUNT: 83

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 9932607	A1 19990701	(199935)*	EN	56[15]		<--
						<--
AU 9920907	A 19990712	(199950)	EN			<--
						<--
EP 1042453	A1 20001011	(200052)	EN			<--
						<--
US 6485969	B1 20021126	(200281)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
WO 9932607 A1		WO 1998-US27289 19981222
US 6485969 B1	Provisional	US 1997-68769P 19971223
EP 1042453 A1		EP 1998-965443 19981222
EP 1042453 A1		WO 1998-US27289 19981222
US 6485969 B1		WO 1998-US27289 19981222
AU 9920907 A		AU 1999-20907 19981222
US 6485969 B1		US 2000-582179 20000622

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9920907 A	Based on	WO 9932607 A
EP 1042453 A1	Based on	WO 9932607 A
US 6485969 B1	Based on	WO 9932607 A

PRIORITY APPLN. INFO: US 1997-68769P 19971223
US 2000-582179 20000622

AN 1999-418916 [199935] WPIX

AB WO 1999032607 A1 UPAB: 20060115
NOVELTY - The composition comprising intact basement membrane of follicle tissue of a vetebrate, which is substantially free of cells of the vertebrate and the basement is retained in its natural three dimensional shape.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for supporting growth and differentiation of eukaryotic cells in vitro comprising, contacting the cells in vitro with a cell growth substrate comprising basement membrane of follicle tissue under conducive conditions to the growth and proliferation of the cells, where the basal lamina is delaminated from the granulosa cells of vertebrate follicle tissue.
USE - The composition is useful for supporting the growth and differentiation of eukaryotic cells cultured in vitro (claimed), especially for inducing the proliferation and growth of eukaryotic cells and can be used as biodegradable

tissue graft constructs for implantation into vertebrate species. Also, the composition is useful in biomedical research, especially for assessing the effects of basement membranes.
ADVANTAGE - The basement lamina of follicle tissue is not attached to connective tissues and therefore, can be easily and quickly isolated from other tissues of the membrane granulosa. The composition supports and enhances the proliferation of cells.

L12 ANSWER 144 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-370850 [199931] WPIX
CROSS REFERENCE: 1998-051837
TITLE: Glass or ceramic surface conditioning in serum protein like solutions
DERWENT CLASS: B04; B07; D16; D22; L01; L02
INVENTOR: DUCHEYNE P; RADIN S
PATENT ASSIGNEE: (DUCH-I) DUCHEYNE P; (RADI-I) RADIN S; (UPEN-C) UNIV PENNSYLVANIA
COUNTRY COUNT: 21

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 9926605	A1 19990603	(199931)*	EN	47[10]		<--
						<--
US 6224913	B1 20010501	(200126)	EN			<--
						<--
US 20010014355	A1 20010816	(200149)	EN			<--
US 6569466	B2 20030527	(200337)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9926605 A1		WO 1998-US24260	19981113
US 6224913 B1	CIP of	US 1996-647171	19960509
US 20010014355 A1	CIP of	US 1996-647171	19960509
US 6569466 B2	CIP of	US 1996-647171	19960509
US 6224913 B1		US 1997-977093	19971124
US 20010014355 A1	Div Ex	US 1997-977093	19971124
US 6569466 B2	Div Ex	US 1997-977093	19971124
US 20010014355 A1		US 2001-793453	20010226
US 6569466 B2		US 2001-793453	20010226

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 20010014355 A1	Div ex	US 6224913 A
US 6569466 B2	Div ex	US 6224913 B

PRIORITY APPLN. INFO: US 1997-977093 19971124
US 1996-647171 19960509
US 2001-793453 20010226
AN 1999-370850 [199931] WPIX
CR 1998-051837
AB WO 1999026605 A1 UPAB: 20060115

NOVELTY - Silica based glass or ceramic material, having a microporous surface layer with serum protein like organic molecules intermingled throughout, and a method for its preparation, by immersion of the glass or ceramic in a solution of serum proteins, are new.
DETAILED DESCRIPTION - A method for conditioning the surface of the glass or ceramic comprises:
(1) immersing in an aqueous solution containing serum protein like molecules for enough time to form a microporous calcium phosphate (Ca-P) surface layer, optionally also containing silicon, intermingled throughout with serum protein like molecules;
(2) exchanging the solution at intervals to allow continuous formation of the Ca-P layer.
An INDEPENDENT CLAIM is included for the product prepared by this process.
USE - The material can be used in filling of bone defects at any site in vertebrates for stimulating growth and repair including fractures, areas of erosion or degradation, osteolysis, holes from screw and pin removal or replacement, for periodontal purposes, and deterioration from old age or disease. It can also be used for in vitro growth of bone and other tissues, optionally with anchorage dependent cells or at sites with such cells.
Biologically active molecules for beneficial purposes which can be incorporated in the glass or ceramic material, either intermingled throughout it or adsorbed on the surface, include growth factors, cytokines, antibiotics, antiinflammatories, analgesics and other drugs, and cell attachment molecules, in addition to any biologically active serum proteins in the basic preparation.
ADVANTAGE - The presence of the calcium/phosphate (Ca-P) layer, and serum protein like molecules intermingled throughout the surface is expected to give improved performance compared to prior art implantation experiments with bioactive glass granules. Experiments also indicate that the presence of silicon in the Ca-P layer stimulates activity.

Member(0003)
ABEQ US 20010014355 A1 UPAB 20060115
NOVELTY - Silica based glass or ceramic material, having a microporous surface layer with serum protein like organic molecules intermingled throughout, and a method for its preparation, by immersion of the glass or ceramic in a solution of serum proteins, are new.
DETAILED DESCRIPTION - A method for conditioning the surface of the glass or ceramic comprises:
(1) immersing in an aqueous solution containing serum protein like molecules for enough time to form a microporous calcium phosphate (Ca-P) surface layer, optionally also containing silicon, intermingled throughout with serum protein like molecules;
(2) exchanging the solution at intervals to allow continuous formation of the Ca-P layer.
An INDEPENDENT CLAIM is included for the product prepared by this process.
USE - The material can be used in filling of bone defects at any site in vertebrates for stimulating growth and repair including fractures, areas of erosion or degradation, osteolysis, holes from screw and pin removal or replacement, for periodontal purposes, and deterioration from old age or disease.
It can also be used for in vitro growth of bone and other tissues, optionally with anchorage dependent cells or at sites with such cells.
Biologically active molecules for beneficial purposes which can be incorporated in the glass or ceramic material, either intermingled throughout it or adsorbed on the surface, include growth factors,

cytokines, antibiotics, antiinflammatories, analgesics and other drugs, and cell attachment molecules, in addition to any biologically active serum proteins in the basic preparation.

ADVANTAGE - The presence of the calcium/phosphate (Ca-P) layer, and serum protein like molecules intermingled throughout the surface is expected to give improved performance compared to prior art implantation experiments with bioactive glass granules. Experiments also indicate that the presence of silicon in the Ca-P layer stimulates activity.

L12 ANSWER 145 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-327166 [199927] WPIX
DOC. NO. CPI: C1999-096811 [199927]
DOC. NO. NON-CPI: N1999-245418 [199927]
TITLE: Trans-catheter occluding implant for medical use
DERWENT CLASS: A95; A96; P31; P32
INVENTOR: BRADY E; GILSON P
PATENT ASSIGNEE: (SALV-N) SALVIAC LTD
COUNTRY COUNT: 81

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9923954	A1	19990520	(199927)*	EN	34[25]		<--
							<--
AU 9897582	A	19990531	(199941)	EN			<--
							<--
EP 1028658	A1	20000823	(200041)	EN			<--
							<--
US 6245090	B1	20010612	(200135)	EN			<--
							<--
AU 739610	B	20011018	(200174)	EN			<--
							<--
JP 2001522629	W	20011120	(200204)	JA	42		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9923954 A1		WO 1998-IE92	19981109
AU 9897582 A		AU 1998-97582	19981109
AU 739610 B		AU 1998-97582	19981109
EP 1028658 A1		EP 1998-951644	19981109
US 6245090 B1		US 1998-188473	19981109
EP 1028658 A1		WO 1998-IE92	19981109
JP 2001522629 W		WO 1998-IE92	19981109
JP 2001522629 W		JP 2000-520056	19981109

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 739610 B	Previous Publ	AU 9897582 A
AU 9897582 A	Based on	WO 9923954 A
EP 1028658 A1	Based on	WO 9923954 A
AU 739610 B	Based on	WO 9923954 A
JP 2001522629 W	Based on	WO 9923954 A

PRIORITY APPLN. INFO: IE 1997-791 19971107
AN 1999-327166 [199927] WPIX
AB WO 1999023954 A1 UPAB: 20050521
NOVELTY - The implant (30) comprises a plug (31) formed of a resilient foam plastic material having a void content greater than 70%.
DETAILED DESCRIPTION - The implant (30) comprises a plug (31) formed of a resilient foam plastic material having a void content greater than 70%. The plug is collapsible for insertion in the vessel lumen and expandable into a shape which contacts the lumen internal surface sufficiently to form a force fit for securing the implant and a barrier to liquid flow through the lumen. The plug is generally cylindrical in shape and can have an arrangement of slots (32) or flights.
USE - For occlusion of vessels in the human body required by medical conditions ranging from critical care applications to cosmetic applications, e.g. arterial and venous embolization, embolization of selective vessel supply to tumors, embolization of aneurysms and sterilization.
ADVANTAGE - The resilient foam plastic material allows the plug to expand and contract to accommodate pulsating pressures e.g. blood pressure. The open cell structure of the outer surface encourages tissue growth and further stabilization of the implant. The implant can be made to act on first insertion as a block to most of the fluid flow or as a total barrier depending on the application. Many geometries can be used to form the implant and the appropriate shape selected for the application. For example, an implant with an elongated S shape or C shape can be used where it is not practical to oversize the plug or to remove enough material from the cross-section to aid delivery. DESCRIPTION OF DRAWINGS - The drawings show a plan view and a cross-sectional view of one type of implant. Implant (30)
Plug (31)
Open slots. (32)

L12 ANSWER 146 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-204992 [199917] WPIX
DOC. NO. CPI: C1999-059675 [199917]
DOC. NO. NON-CPI: N1999-151014 [199917]
TITLE: Biodegradable fibre reinforced composite, used as prostheses
DERWENT CLASS: A18; A28; A32; A96; D22; P32; P34
INVENTOR: CORDEN T J; DOWNES S; DOWNES S S O B S; FISHER S E; JONES I A; RUDD C D
PATENT ASSIGNEE: (UYNO-N) UNIV NOTTINGHAM; (BTGB-C) BTG INT LTD
COUNTRY COUNT: 80

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9911297	A2	19990311	(199917)*	EN	55[12]		<--
AU 9887382	A	19990322	(199931)	EN			<--
EP 1005379	A1	20000607	(200032)	EN			<--
JP 2001514049	W	20010911	(200167)	JA	58		<--
AU 757775	B	20030306	(200324)	EN			<--
EP 1005379	B1	20040218	(200413)	EN			
US 20040054372	A1	20040318	(200421)	EN			

DE 69821774 E 20040325 (200423) DE
ES 2218844 T3 20041116 (200477) ES

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9911297 A2		WO 1998-GB2399	19980819
AU 9887382 A		AU 1998-87382	19980819
AU 757775 B		AU 1998-87382	19980819
DE 69821774 E		DE 1998-69821774	19980819
EP 1005379 A1		EP 1998-938777	19980819
EP 1005379 B1		EP 1998-938777	19980819
DE 69821774 E		EP 1998-938777	19980819
ES 2218844 T3		EP 1998-938777	19980819
EP 1005379 A1		WO 1998-GB2399	19980819
JP 2001514049 W		WO 1998-GB2399	19980819
EP 1005379 B1		WO 1998-GB2399	19980819
US 20040054372 A1 Cont of		WO 1998-GB2399	19980819
DE 69821774 E		WO 1998-GB2399	19980819
JP 2001514049 W		JP 2000-508398	19980819
US 20040054372 A1 Div Ex		US 2000-506363	20000218
US 20040054372 A1		US 2003-625524	20030724

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 757775 B	Previous Publ	AU 9887382 A
DE 69821774 E	Based on	EP 1005379 A
ES 2218844 T3	Based on	EP 1005379 A
AU 9887382 A	Based on	WO 9911297 A
EP 1005379 A1	Based on	WO 9911297 A
JP 2001514049 W	Based on	WO 9911297 A
AU 757775 B	Based on	WO 9911297 A
EP 1005379 B1	Based on	WO 9911297 A
DE 69821774 E	Based on	WO 9911297 A

PRIORITY APPLN. INFO: GB 1997-17433 19970819
AN 1999-204992 [199917] WPIX
AB WO 1999011297 A2 UPAB: 20091216
NOVELTY - Biodegradable fibre reinforced composite, used as a medical implant, is shaped and processed using a resin reaction injection transfer moulding process. The process gives desired shape, physical properties and degradation profile.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (a) the shaped preform and/or composition; (b) production of the shaped composite; and (c) a shaped composite comprising thermoplastic matrix and fibres with differential degradation of matrix with respect to fiibres, adapted to degrade via an intermediate shaped structure comprising residual porous matrix or residual fibre. Selection of the composite is made for primary growth or a preferred cell type, throughout the voids created by degraded matrix or fibre, according to the desired healing or reconstruction locus.
USE - Used as an implant in surgical reconstruction, preferably in reconstructive surgery of bone, cartilage or meniscus, selected from cranial, maxillofacial and orthopaedic surgery for the purpose of fixation, augmentation and filling in of defects (claimed). They are used as templates for in vivo tissue production using bioengineering techniques by means of impregnation with cells, inductive proteins, therapeutic substances, etc.,

where the composite is then adapted for introduction to a living host such as the human or animal body, and for subsequently harvesting the composite, partially or substantially impregnated and/or degraded, and reimplanting in a locus for reconstructive surgery (claimed). It is particularly used for implantation into muscle for attachment and growth of living cells (claimed). The composites may also be used to replace e.g. glass reinforced polypropylene in various industries, and in the fields of consumer goods, packaging, storage and transport aids.

ADVANTAGE - The composite is biodegradable and biocompatible. It has differential biodegradation properties. It may be moulded to any size or shape necessary for implantation or reconstruction. The process may be used on a small non-industrial scale for immediate use. Patient specific implants can be produced directly from CT scan data using rapid prototyping techniques.

DESCRIPTION OF DRAWINGS - The drawing shows a block schematic representation of the reconstructive surgery process. Area to be surgically treated (2A)

Complementary feature (2B)

Preformed mould (5)

Shaped product (7)

L12 ANSWER 147 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 1998-456823 [199839] WPIX

DOC. NO. CPI: C1998-138073 [199839]

DOC. NO. NON-CPI: N1998-356547 [199839]

TITLE: Implant for guided or controlled bone regeneration - comprising fibrous material, e.g. titanium wool

DERWENT CLASS: D22; P32; P34

INVENTOR: RENVERT S

PATENT ASSIGNEE: (MIGR-N) MIGRATA UK LTD

COUNTRY COUNT: 20

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9835628	A1	19980820	(199839)*	EN	12[0]		<--
							<--
EP 1003437	A1	20000531	(200031)	EN			<--
							<--
JP 2001511677	W	20010814	(200154)	JA	9		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9835628 A1		WO 1998-SE265	19980213
EP 1003437 A1		EP 1998-904501	19980213
JP 2001511677 W		JP 1998-535671	19980213
EP 1003437 A1		WO 1998-SE265	19980213
JP 2001511677 W		WO 1998-SE265	19980213

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1003437 A1	Based on	WO 9835628 A
JP 2001511677 W	Based on	WO 9835628 A

PRIORITY APPLN. INFO: SE 1997-514 19970214
AN 1998-456823 [199839] WPIX
AB WO 1998035628 A1 UPAB: 20050522
An implant consists of a three-dimensional, biodegradable and biocompatible fibrous material. It is three dimensional, porous, space-creating and allows (or can be modified to allow) bone cells to attach to it and grow three-dimensionally.
USE - The implant is of especial use in the face, e.g. in teeth prosthetics and repairing accident damage, as well as elsewhere, to provide guided or controlled bone regeneration.
ADVANTAGE - Sufficient rigidity and space-providing ability is provided when the mesh of Jovanovic et al (International Journal of Oral and Maxillofacial Implants, Volume 10, Number 1 (1995) is replaced by the present fibrous implant. The implant can be provided in almost any shape, and without expensive equipment.

L12 ANSWER 148 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-361491 [199831] WPIX
DOC. NO. NON-CPI: N1998-282310 [199831]
TITLE: Implantable heart valve with rotatable suturing ring - has valve body supporting valve mechanism with circular exterior wall extending between inflow and outflow valve body rims and interior valve opening annulus
DERWENT CLASS: P32
INVENTOR: JOHNSON K M
PATENT ASSIGNEE: (MEDT-C) MEDTRONIC INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 5766240	A	19980616	(199831)*	EN	14[10]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5766240 A		US 1996-739093	19961028

PRIORITY APPLN. INFO: US 1996-739093 19961028
AN 1998-361491 [199831] WPIX
AB US 5766240 A UPAB: 20060114
The implantable heart valve has at least one valve mechanism movable between an open position and a closed position. A valve body (12) supports the valve mechanism having a circular exterior wall extending between inflow and outflow valve body rims and an interior valve opening annulus. An exterior rotatable suturing ring (14) is formed of suturing ring fabric for suturing the heart valve to a natural heart tissue orifice. A device secures the suturing ring for rotation about the valve body exterior wall upon application of a rotational torque.
The suturing securing device is formed on the annular exterior wall of the heart valve body providing a rotational guide about which the suturing ring is rotatable. A device is formed within the suturing ring for compressing an annular section of the suturing ring fabric into engagement against the rotational guide with a consistent force.

ADVANTAGE - Provides relatively consistent rotation torque and inhibits intrusion of suture tails and tissue ingrowth into the valve mechanism.

L12 ANSWER 149 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-239861 [199821] WPIX
DOC. NO. CPI: C1998-074833 [199821]
DOC. NO. NON-CPI: N1998-189747 [199821]
TITLE: Compositions for promoting growth of muscle, bone or cartilage - comprise e.g. an organic matrix which is prepared from demineralised ground bone and contains growth factors
DERWENT CLASS: B04; P32; P34
INVENTOR: ASHKAR S; ATALA A
PATENT ASSIGNEE: (CHIL-N) CHILDRENS MEDICAL CENT
COUNTRY COUNT: 77

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9814222	A1	19980409	(199821)*	EN	29[0]		<--
AU 9746031	A	19980424	(199835)	EN			<--
EP 929322	A1	19990721	(199933)	EN			<--
US 6165487	A	20001226	(200103)	EN			<--
JP 2001501934	W	20010213	(200112)	JA	36		<--
AU 744932	B	20020307	(200229)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9814222 A1		WO 1997-US17530	19970929
US 6165487 A	Provisional	US 1996-27123P	19960930
AU 9746031 A		AU 1997-46031	19970929
AU 744932 B		AU 1997-46031	19970929
EP 929322 A1		EP 1997-944567	19970929
US 6165487 A	CIP of	US 1997-937873	19970929
EP 929322 A1		WO 1997-US17530	19970929
US 6165487 A	Cont of	WO 1997-US17530	19970929
JP 2001501934 W		WO 1997-US17530	19970929
JP 2001501934 W		JP 1998-516768	19970929
US 6165487 A		US 1998-58048	19980409

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 744932 B	Previous Publ	AU 9746031 A
AU 9746031 A	Based on	WO 9814222 A
EP 929322 A1	Based on	WO 9814222 A
JP 2001501934 W	Based on	WO 9814222 A
AU 744932 B	Based on	WO 9814222 A

PRIORITY APPLN. INFO: US 1996-27123P 19960930
WO 1997-US17530 19970929
US 1997-937873 19970929
US 1998-58048 19980409

AN 1998-239861 [199821] WPIX

AB WO 1998014222 A1 UPAB: 20060114

The following are claimed: (A) programming a non-immunogenic matrix (NIM) for preparing a target biomorphic form, comprising: (a) selecting a treatment step for programming the NIM into a target biomorphic form; and (b) treating the NIM such that the biomorphic form is prepared. (B) preparing an organic material for promoting tissue growth or repair, comprising: (a) demineralising ground bone to give a demineralised organic matrix; and (b) treating the matrix with (i) hyaluronic acid or a glycosaminoglycan, or (ii) with a mineral acid, to give the desired organic material. (C) injectable, non-immunogenic composition, for promoting tissue growth or repair, comprising: (a) at least 80% collagen matrix by weight; and (b) a growth factor to promote tissue growth. The composition is free of endogenous growth factors. (D) promoting tissue growth, without causing inflammation, comprising injecting into the subject an injectable, non-immunogenic composition comprising: (a) at least 80% collagen matrix by weight; and (b) a growth factor to promote tissue growth. (E) promoting differentiation of mesenchymal cells (MCs), comprising contacting the MCs with a matrix comprising: (a) at least 80% collagen matrix by weight; and (b) a growth factor to promote tissue growth. (F) promoting attachment and fusion of MCs, comprising implanting a matrix into a tissue (containing MCs) so that the MCs attach to the matrix and become fused. The matrix comprises (i) means for attracting MCs to the matrix, (ii) means for attaching MCs to the matrix, and (iii) means for promoting fusion of MCs.

USE - The materials/processes may be used for selectively promoting tissue regrowth in vivo, to facilitate wound healing and post-surgical recovery of patients who have suffered tissue damage or destruction due to accident or disease. They can be used to promote regrowth of bone, cartilage or muscle in humans or animals.

ADVANTAGE - The compositions can promote recruitment of pluripotent (non-differentiated) cells from the tissue surrounding the implant, thus providing cells which can grow and differentiate within the implant. Chemoattractants which can attract appropriate cells can be used in the compositions. The matrix can be prepared in such a way as to prevent invasion of the implant by differentiated cells .

L12 ANSWER 150 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-193166 [199817] WPIX
TITLE: Reforming intervertebral disc tissue by combining biodegradable substrate with nucleus pulposus cells - and implanting resulting hybrid material, provides better long term results than use of synthetic prostheses
DERWENT CLASS: A23; A96; B04; D16; D22; L01; P31; P32
INVENTOR: CHIN GAN J C; DUCHEYNE P; GAN J C; GAN J C C; SHAPIRO I; VRESILOVIC E
PATENT ASSIGNEE: (UPEN-C) UNIV PENNSYLVANIA
COUNTRY COUNT: 22

PATENT INFO ABBR.:

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      AU 758844        B   20030403 (200335)# EN
      US 6569442       B2  20030527 (200337)  EN
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APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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US 20010020476 A1 Div Ex		US 1996-694191	19960808
US 6569442 B2 Div Ex		US 1996-694191	19960808
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AU 731019 B		AU 1997-39103	19970806
AU 2001053939 A Div Ex		AU 1997-39103	19970806
AU 758844 B Div Ex		AU 1997-39103	19970806
EP 928173 A1		EP 1997-936433	19970806
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JP 2002507899 W		JP 1998-508201	19970806
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US 6569442 B2 Div Ex		US 1999-314511	19990519
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US 6569442 B2		US 2001-833284	20010412
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FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 758844 B	Previous Publ	AU 2001053939 A
AU 731019 B	Previous Publ	AU 9739103 A
AU 2001053939 A	Div ex	AU 731019 B
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US 6240926 B1	Div ex	US 5964807 A
US 20010020476 A1	Div ex	US 5964807 A
US 6569442 B2	Div ex	US 5964807 A
US 20010020476 A1	Div ex	US 6240926 A
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AU 9739103 A	Based on	WO 9805274 A
EP 928173 A1	Based on	WO 9805274 A
AU 731019 B	Based on	WO 9805274 A

JP 2002507899 W Based on WO 9805274 A

PRIORITY APPLN. INFO: US 1996-694191 19960808
US 1999-314511 19990519
US 2001-833284 20010412
AU 2001-53939 20010620

AN 1998-193166 [199817] WPIX

AB WO 19980052/4 A1 UPAB: 20060114
Reforming intervertebral disc tissue of a degenerated nucleus pulposus comprises evacuating the tissue, combining it with a biodegradable substrate and implanting the resulting hybrid material into the evacuated nucleus pulposus space. Also claimed are: (i) the preparation of an invertebral disc cell culture comprising treating invertebral disc tissue with collagenase, washing cells to remove collagenase and incubating the cells in a hyaluronidase-containing medium until cell attachment occurs; (ii) hybrid material for reforming degenerated disc tissue comprises a biodegradable substrate and invertebral disc cells; and (iii) a bioactive substrate comprising porous polymer foam coated with a sol-gel bioactive material.
USE - The process repairs damaged or degenerated discs.
ADVANTAGE - The hybrid materials guide and stimulate the growth of disc cells and tissues, to provide better long term results than replacement with a synthetic prosthesis. The biodegradable substrate acts as a temporary support and as it degrades, it allows nucleus pulposus and annulus fibrosus ingrowth. The process is carried out in situ, does not require removal of the entire disc and replaces lost or damaged tissue resulting in an improvement or elimination of the conditions associated with the degenerated disc.

Member(0004)

ABEQ US 5964807 A UPAB 20060114
Reforming intervertebral disc tissue of a degenerated nucleus pulposus comprises evacuating the tissue, combining it with a biodegradable substrate and implanting the resulting hybrid material into the evacuated nucleus pulposus space. Also claimed are: (i) the preparation of an invertebral disc cell culture comprising treating invertebral disc tissue with collagenase, washing cells to remove collagenase and incubating the cells in a hyaluronidase-containing medium until cell attachment occurs; (ii) hybrid material for reforming degenerated disc tissue comprises a biodegradable substrate and invertebral disc cells; and (iii) a bioactive substrate comprising porous polymer foam coated with a sol-gel bioactive material.
USE - The process repairs damaged or degenerated discs.
ADVANTAGE - The hybrid materials guide and stimulate the growth of disc cells and tissues, to provide better long term results than replacement with a synthetic prosthesis. The biodegradable substrate acts as a temporary support and as it degrades, it allows nucleus pulposus and annulus fibrosus ingrowth. The process is carried out in situ, does not require removal of the entire disc and replaces lost or damaged tissue resulting in an improvement or elimination of the conditions associated with the degenerated disc.

L12 ANSWER 151 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-179136 [199816] WPIX
CROSS REFERENCE: 2000-618181; 2002-480551; 2002-480552; 2002-480553; 2003-075544; 2003-776794; 2004-155812; 2006-124857; 2006-502361; 2007-693096

DOC. NO. CPI: C1998-057526 [199816]
DOC. NO. NON-CPI: N1998-141735; N2002-379564 [199816] [200252]
TITLE: Transplanting chondrocyte(s) to articulating joint surface for defect repair - by placing the cells on haemostatic barrier which covers bone at the defect site then covering with a patch
DERWENT CLASS: B04; D22; P31; P32; P34
INVENTOR: HANSEN H V; IDOURAINE A; LUNDEGAARD C; LUNDSGAARD C; OSTHER K B; VIBE-HANSEN H; VIBEHANSEN H; VIDE-HANSEN H; VIBE H H
PATENT ASSIGNEE: (VERI-N) VERIGEN AG; (VTSH-N) VTS HOLDINGS LLC; (VTSH-N) VTS HOLDINGS LTD; (VTSI-N) VTSI VERIGEN TRANSPLANTATION SERVICE INC; (VTSI-N) VTSI VERIGEN TRANSPLANTATION SERVICE INT
COUNTRY COUNT: 75

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EP 1384452      A1 20040128 (200409)  EN
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EP 1006950      B1 20040407 (200425)  EN
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DE 69728569     E  20040513 (200434)  DE
ES 2211722      T3 20040716 (200447)  ES
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SG 119137       A1 20060228 (200622)  EN
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AU 2007234527   A1 20071206 (200812)# EN
HU 225952       B1 20080128 (200819)  HU
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ES 2325206      T3 20090828 (201003)  ES
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PATENT NO	KIND	APPLICATION	DATE
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US 7048750	B2	CIP of	US 5759190	A
US 20060195122	A1	CIP of	US 5759190	A
US 6283980	B1	Cont of	US 5989269	A
US 6379367	B1	Cont of	US 5989269	A
US 20020091396	A1	Cont of	US 5989269	A
US 20020116014	A1	Cont of	US 5989269	A
US 20020116015	A1	Cont of	US 5989269	A
US 20020151912	A1	Cont of	US 5989269	A
US 6592598	B2	Cont of	US 5989269	A
US 6592599	B2	Cont of	US 5989269	A
US 6599300	B2	Cont of	US 5989269	A
US 6599301	B2	Cont of	US 5989269	A
US 20030195532	A1	Cont of	US 5989269	A
US 7048750	B2	Cont of	US 5989269	A
US 20060195122	A1	Cont of	US 5989269	A
US 6379367	B1	Cont of	US 6283980	B
US 20020091396	A1	Cont of	US 6283980	B
US 20020116014	A1	Cont of	US 6283980	B
US 20020116015	A1	Cont of	US 6283980	B
US 20020151912	A1	Cont of	US 6283980	B
US 6592598	B2	Cont of	US 6283980	B
US 6592599	B2	Cont of	US 6283980	B
US 6599300	B2	Cont of	US 6283980	B
US 6599301	B2	Cont of	US 6283980	B
US 20030195532	A1	Cont of	US 6283980	B

US 7048750	B2	Cont of	US 6283980	B
US 20060195122	A1	Cont of	US 6283980	B
US 20020091396	A1	Cont of	US 6379367	B
US 20020116014	A1	Cont of	US 6379367	B
US 20020116015	A1	Cont of	US 6379367	B
US 20020151912	A1	Cont of	US 6379367	B
US 6592598	B2	Cont of	US 6379367	B
US 6592599	B2	Cont of	US 6379367	B
US 6599300	B2	Cont of	US 6379367	B
US 20030195532	A1	Cont of	US 6379367	B
US 7048750	B2	Cont of	US 6379367	B
US 20060195122	A1	Cont of	US 6379367	B
US 20030195532	A1	Cont of	US 6592598	B
US 7048750	B2	Cont of	US 6592598	B
US 20060195122	A1	Cont of	US 6592598	B
US 20030195532	A1	Cont of	US 6592599	B
US 7048750	B2	Cont of	US 6592599	B
US 20060195122	A1	Cont of	US 6592599	B
US 20030195532	A1	Cont of	US 6599300	B
US 7048750	B2	Cont of	US 6599300	B
US 20060195122	A1	Cont of	US 6599300	B
US 20030195532	A1	Cont of	US 6599301	B
US 7048750	B2	Cont of	US 6599301	B
US 20060195122	A1	Cont of	US 6599301	B
US 20060195122	A1	Cont of	US 7048750	B
AU 9741710	A	Based on	WO 9808469	A
BR 9711967	A	Based on	WO 9808469	A
CZ 9900587	A3	Based on	WO 9808469	A
EP 1006950	A2	Based on	WO 9808469	A
NZ 334400	A	Based on	WO 9808469	A
KR 2000035886	A	Based on	WO 9808469	A
HU 2000002980	A2	Based on	WO 9808469	A
AU 731162	B	Based on	WO 9808469	A
SK 9900240	A3	Based on	WO 9808469	A
JP 2002502272	W	Based on	WO 9808469	A
CA 2264138	C	Based on	WO 9808469	A
MX 9901794	A1	Based on	WO 9808469	A
RU 2214197	C2	Based on	WO 9808469	A
EP 1006950	B1	Based on	WO 9808469	A
DE 69728569	E	Based on	WO 9808469	A
SK 285075	B6	Based on	WO 9808469	A
CZ 297248	B6	Based on	WO 9808469	A
MX 238116	B	Based on	WO 9808469	A
HU 225952	B1	Based on	WO 9808469	A
KR 686412	B1	Based on	WO 9808469	A
ES 2325206	T3	Based on	EP 1384452	A

PRIORITY APPLN. INFO:	US 1997-857090	19970515
	US 1996-704891	19960830
	US 1999-320246	19990526
	US 2000-690252	20001017
	AU 2001-53994	20010621
	US 2002-55105	20020123
	US 2002-91006	20020304
	US 2002-90322	20020305
	US 2002-93129	20020306
	US 2003-444391	20030523
	US 2006-375180	20060314
	AU 2002-29301	20020328

AU 2004-202477 20040603
AU 2007-234527 20071116

AN 1998-179136 [199816] WPIX
CR 2000-618181; 2002-480551; 2002-480552; 2002-480553; 2003-075544; 2003-776794; 2004-155812; 2006-124857; 2006-502361; 2007-693096
AB WO 1998008469 A2 UPAB: 20060114
Treatment of articulating joint surface cartilage comprises: (i) placing a haemostatic barrier (HB) next to the surface; (ii) placing chondrocytes (A), in a suitable matrix, on the barrier and (iii) covering the treated area with a patch. Also claimed are: (1) kits containing HB, pretreated to resist resorption; covering patch, similarly treated, and organic glues for attaching these components to the surface; (2) a surgical instrument for sculpting a graft site in an articular bone cartilage surface having cutting edge, attached to a handle or rod, so that when rotated or scribed in the site, the walls of the site are sculpted to be non-linear and/or undulated. The covering patch is a semi-permeable collagen matrix, free of intact cells, with a porous surface that contacts the grafted (A). HB is a resorbable, semi-permeable material, preferably collagen, that inhibits or prevents vascular infiltration, e.g. 'Surgicel' (RTM), pretreated with a fixative such as glutaraldehyde to increase the time required for its resorption. Also suitable is 'BioGide' (RTM). The figure shows typical blade shapes. Alternatively, the instrument has a helical blade spiralling up the surface of a tubular or circular rod.
USE - The method is used to repair damaged cartilage by transplant of (autologous) (A).
ADVANTAGE - Repairing cartilage damage at an early stage will reduce the number of patients who require full joint replacements or who develop osteoarthritis.Surgical sculpting of the site ensures better retention of the graft, i.e. it provides anchorage and reduces shearing in the marginal zone between the implant and existing cartilage. HB prevents overgrowth of vascular tissue from the underlying bone.

Member(0002)
ABEQ US 5759190 A UPAB 20060114
Treatment of articulating joint surface cartilage comprises: (i) placing a haemostatic barrier (HB) next to the surface; (ii) placing chondrocytes (A), in a suitable matrix, on the barrier and (iii) covering the treated area with a patch. Also claimed are: (1) kits containing HB, pretreated to resist resorption; covering patch, similarly treated, and organic glues for attaching these components to the surface; (2) a surgical instrument for sculpting a graft site in an articular bone cartilage surface having cutting edge, attached to a handle or rod, so that when rotated or scribed in the site, the walls of the site are sculpted to be non-linear and/or undulated. The covering patch is a semi-permeable collagen matrix, free of intact cells, with a porous surface that contacts the grafted (A). HB is a resorbable, semi-permeable material, preferably collagen, that inhibits or prevents vascular infiltration, e.g. 'Surgicel' (RTM), pretreated with a fixative such as glutaraldehyde to increase the time required for its resorption. Also suitable is 'BioGide' (RTM). The figure shows typical blade shapes. Alternatively, the instrument has a helical blade spiralling up the surface of a tubular or circular rod.
USE - The method is used to repair damaged cartilage by transplant of (autologous) (A).
ADVANTAGE - Repairing cartilage damage at an early stage will reduce the number of patients who require full joint replacements or who develop osteoarthritis.Surgical sculpting of the site ensures better retention of

the graft, i.e. it provides anchorage and reduces shearing in the marginal zone between the implant and existing cartilage. HB prevents overgrowth of vascular tissue from the underlying bone.

Member(0005)
ABEQ US 5989269 A UPAB 20060114
Treatment of articulating joint surface cartilage comprises: (i) placing a haemostatic barrier (HB) next to the surface; (ii) placing chondrocytes (A), in a suitable matrix, on the barrier and (iii) covering the treated area with a patch. Also claimed are: (1) kits containing HB, pretreated to resist resorption; covering patch, similarly treated, and organic glues for attaching these components to the surface; (2) a surgical instrument for sculpting a graft site in an articular bone cartilage surface having cutting edge, attached to a handle or rod, so that when rotated or scribed in the site, the walls of the site are sculpted to be non-linear and/or undulated. The covering patch is a semi-permeable collagen matrix, free of intact cells, with a porous surface that contacts the grafted (A). HB is a resorbable, semi-permeable material, preferably collagen, that inhibits or prevents vascular infiltration, e.g. 'Surgicel' (RTM), pretreated with a fixative such as glutaraldehyde to increase the time required for its resorption. Also suitable is 'BioGide' (RTM). The figure shows typical blade shapes. Alternatively, the instrument has a helical blade spiralling up the surface of a tubular or circular rod.

USE - The method is used to repair damaged cartilage by transplant of (autologous) (A).

ADVANTAGE - Repairing cartilage damage at an early stage will reduce the number of patients who require full joint replacements or who develop osteoarthritis.Surgical sculpting of the site ensures better retention of the graft, i.e. it provides anchorage and reduces shearing in the marginal zone between the implant and existing cartilage. HB prevents overgrowth of vascular tissue from the underlying bone.

L12 ANSWER 152 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-120292 [199811] WPIX
DOC. NO. CPI: C1998-039481 [199811]
DOC. NO. NON-CPI: N1998-095745 [199811]
TITLE: Prosthetic device for promoting and supporting guided bone tissue regeneration - comprises perforated tray screwed to remaining bone and metallic dental tooth root replacement implants
DERWENT CLASS: A96; D21; D22; P31; P32
INVENTOR: MORGAN F H
PATENT ASSIGNEE: (SOFA-N) SOFAMOR DANEK PROPERTIES INC
COUNTRY COUNT: 74

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9743978	A1	19971127	(199811)*	EN	34[10]		<--
AU 9732092	A	19971209	(199824)	EN			<--
US 5769637	A	19980623	(199832)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9743978 A1		WO 1997-US8672	19970522
US 5769637 A		US 1996-647429	19960522
AU 9732092 A		AU 1997-32092	19970522

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9732092 A	Based on	WO 9743978 A

PRIORITY APPLN. INFO: US 1996-647429 19960522
AN 1998-120292 [199811] WPIX
AB WO 1997043978 A1 UPAB: 20060114
A prosthetic device promotes and supports guided bone tissue regeneration in missing, excised or defective portions of the human mandible or maxilla. The device consists of a bone attachment tray (12) formed of tissue-biocompatible metallic sheet with perforations to receive bone screws to fix the tray to stump portions and ridge sections of the mandible or maxilla near the missing excised or defective parts. Tissue-biocompatible metallic tooth root replacement implants (24) are releasably fixed at one end to the inner surface of the tray to depend from it into the missing, excised or defective bone portions for incorporation in regenerated tissue.
USE - The device is used for human artificial tooth root implantation and ridge augmentation for the guided regeneration of bone in defects of the human maxilla and mandible.
ADVANTAGE - The device encourages healthy bone regeneration in bony defects of major or minor magnitude allowing concomitant placement of post-type dental implants in the regenerated bone tissue.

Member(0003)
ABEQ US 5769637 A UPAB 20060114
A prosthetic device promotes and supports guided bone tissue regeneration in missing, excised or defective portions of the human mandible or maxilla. The device consists of a bone attachment tray (12) formed of tissue-biocompatible metallic sheet with perforations to receive bone screws to fix the tray to stump portions and ridge sections of the mandible or maxilla near the missing excised or defective parts. Tissue-biocompatible metallic tooth root replacement implants (24) are releasably fixed at one end to the inner surface of the tray to depend from it into the missing, excised or defective bone portions for incorporation in regenerated tissue.
USE - The device is used for human artificial tooth root implantation and ridge augmentation for the guided regeneration of bone in defects of the human maxilla and mandible.
ADVANTAGE - The device encourages healthy bone regeneration in bony defects of major or minor magnitude allowing concomitant placement of post-type dental implants in the regenerated bone tissue.

L12 ANSWER 153 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-041714 [199804] WPIX
DOC. NO. CPI: C1998-013866 [199804]
DOC. NO. NON-CPI: N1998-033462 [199804]
TITLE: Medical device e.g. synthetic bladder patch - for use in contact with body tissue or fluid, is coated with layer

of pentosan poly-sulphate
DERWENT CLASS: A11; A35; A96; B07; D22; P32; P34
INVENTOR: PARSONS C L; ZUPKAS P F
PATENT ASSIGNEE: (REGC-C) UNIV CALIFORNIA; (UROS-N) UROS CORP
COUNTRY COUNT: 20

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9741901	A1	19971113	(199804)*	EN	6[1]		<--
							<--
EP 900092	A1	19990310	(199914)	EN			<--
							<--
US 5935094	A	19990810	(199938)	EN			<--
							<--
JP 2000510720	W	20000822	(200045)	JA	23		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9741901 A1		WO 1997-US7178	19970429
US 5935094 A	Cont of	US 1996-642391	19960503
EP 900092 A1		EP 1997-921445	19970429
JP 2000510720 W		JP 1997-539992	19970429
EP 900092 A1		WO 1997-US7178	19970429
JP 2000510720 W		WO 1997-US7178	19970429
US 5935094 A		US 1997-942972	19971003

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 900092 A1	Based on	WO 9741901 A
JP 2000510720 W	Based on	WO 9741901 A

PRIORITY APPLN. INFO: US 1996-642391 19960503
US 1997-942972 19971003

AN 1998-041714 [199804] WPIX

AB WO 1997041901 A1 UPAB: 20050520
Medical device comprises a layer of pentosanpolysulphate (PPS) adapted to attenuate attachment of salts, minerals, proteins, cells and other undesirable materials onto the medical device and also to attenuate an inflammatory or foreign body reaction to the medical device, allow growth of healthy normal tissue in a vicinity of the device, and reduce the risk of infection associated with bacteria attachment to the device surface. Also claimed is a method of coating a surface of a medical device with a layer of pentosanpolysulphate which comprises providing an attachment area on the surface of the device or a pentosanpolysulphate molecule and exposing the surface of the device to a solution comprising pentosanpolysulphate or derivative of it, to bond the layer of PPS to the surface of the medical device and preferably removing ≥ 1 byproduct or residue from the device surface to leave only the attachment area coated with the PPS layer.
The device is (1) a synthetic bladder patch for providing pressure relief to spontaneous contractions of a bladder and for enlarging the bladder to increase the volume of the bladder which comprises an artificial material coated with a layer of PPS to allow permanent implantation of the bladder into a patient; (2) a non-dissolvable suture for permanently attaching a device in

a urinary tract of a patient comprising a base material coated with PPS; (3) a ureteral stent for substituting the function of the ureter as a conduit for the passage of urine from the kidneys to the bladder for extended periods, which comprises a polymeric base material forming a tube having inner and outer surfaces coated with PPS to allow the stent to remain within the patient for > 6 months or (4) an intravesicle infuser for implantation into a bladder for extended periods which comprises a polymeric base material and a layer of PPS over portions of the base material.

USE - The device is adapted for used in contact with body tissue or fluids and is a synthetic bladder patch, non-dissolvable suture, ureteral stent or intravesicle infuser.

ADVANTAGE - The PPS coating enhances the biocompatibility of the medical devices.

Member(0003)

ABEQ US 5935094 A UPAB 20050520

Medical device comprises a layer of pentosanpolysulphate (PPS) adapted to attenuate attachment of salts, minerals, proteins, cells and other undesirable materials onto the medical device and also to attenuate an inflammatory or foreign body reaction to the medical device, allow growth of healthy normal tissue in a vicinity of the device, and reduce the risk of infection associated with bacteria attachment to the device surface. Also claimed is a method of coating a surface of a medical device with a layer of pentosanpolysulphate which comprises providing an attachment area on the surface of the device or a pentosanpolysulphate molecule and exposing the surface of the device to a solution comprising pentosanpolysulphate or derivative of it, to bond the layer of PPS to the surface of the medical device and preferably removing ≥ 1 byproduct or residue from the device surface to leave only the attachment area coated with the PPS layer.

The device is (1) a synthetic bladder patch for providing pressure relief to spontaneous contractions of a bladder and for enlarging the bladder to increase the volume of the bladder which comprises an artificial material coated with a layer of PPS to allow permanent implantation of the bladder into a patient; (2) a non-dissolvable suture for permanently attaching a device in a urinary tract of a patient comprising a base material coated with PPS; (3) a ureteral stent for substituting the function of the ureter as a conduit for the passage of urine from the kidneys to the bladder for extended periods, which comprises a polymeric base material forming a tube having inner and outer surfaces coated with PPS to allow the stent to remain within the patient for > 6 months or (4) an intravesicle infuser for implantation into a bladder for extended periods which comprises a polymeric base material and a layer of PPS over portions of the base material.

USE - The device is adapted for used in contact with body tissue or fluids and is a synthetic bladder patch, non-dissolvable suture, ureteral stent or intravesicle infuser.

ADVANTAGE - The PPS coating enhances the biocompatibility of the medical devices.

L12 ANSWER 154 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER: 1998-032641 [199803] WPIX

TITLE: Substrate for cell growth, in e.g. wound healing and tissue repair - comprises scaffold of water-insoluble hyaluronic acid defining interconnecting pores

DERWENT CLASS: B04; D16; D22; P32; P34

INVENTOR: KIM H D; VALENTINI R F
PATENT ASSIGNEE: (UYBW-C) UNIV BROWN; (UYBW-C) UNIV BROWN RES FOUND
COUNTRY COUNT: 20

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 9745532	A1 19971204	(199803)*	EN	25[2]		<--
						<--
EP 907721	A1 19990414	(199919)	EN			<--
						<--
US 5939323	A 19990817	(199939)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9745532 A1		WO 1997-US9067	19970528
US 5939323 A	Provisional	US 1996-18492P	19960528
EP 907721 A1		EP 1997-928684	19970528
US 5939323 A		US 1997-864709	19970528
EP 907721 A1		WO 1997-US9067	19970528

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 907721 A1	Based on	WO 9745532 A

PRIORITY APPLN. INFO: US 1996-18492P 19960528
US 1997-864709 19970528
AN 1998-032641 [199803] WPIX
AB WO 1997045532 A1 UPAB: 20060113
Forming a substrate for cell growth comprises: (a) dissolving a water-insoluble hyaluronic acid (HA) derivative in a first solvent; (b) forming a mixture of the first solvent, the water-insoluble HA derivative and a pore-forming agent (PFA) that is insoluble in the first solvent, and (c) contacting the mixture with a second solvent (in which the HA derivative is insoluble but the PFA is soluble) so that the first solvent and the PFA are extracted from the mixture to form a porous scaffold of water-insoluble HA derivative. Also claimed is a substrate for cell growth, comprising a scaffold of water-insoluble derivatised HA, defining interconnected pores of sufficient size to permit cell ingrowth into the pores. The derivatised HA is a covalent conjugate of HA and a water-insoluble moiety that renders the conjugate insoluble in water.
USE - The substrate may be used for in vitro and in vivo tissue repair and reconstruction (including bone, cartilage or visceral organ repair) and wound healing.
ADVANTAGE - The scaffold slowly degrades so that eventually it is completely replaced by tissue. The scaffold can promote migration, adherence, proliferation and synthesis of new tissue inside its pores and it does not produce acidic degradation products which may be unhelpful to tissue repair.

L12 ANSWER 155 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1998-032344 [199803] WPIX
DOC. NO. CPI: C1998-010940 [199803]
DOC. NO. NON-CPI: N1998-025977 [199803]

TITLE: Use of condensed calcium phosphate as resorbable biomaterial in implant - which forms structure with interconnecting pores to allow bone tissue penetration and ingrowth and joining of soft and hard tissues
DERWENT CLASS: A96; B07; D21; D22; P32; P34
INVENTOR: GRYNPAS M; KANDEL R; PILLIAR R
PATENT ASSIGNEE: (ONET-N) 1218122 ONTARIO INC; (GRYN-I) GRYNPAS M; (KAND-I) KANDEL R; (PILL-I) PILLIAR R
COUNTRY COUNT: 74

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9745147	A1	19971204	(199803)*	EN	51[9]		<--
							<--
AU 9727593	A	19980105	(199821)	EN			<--
							<--
EP 906128	A1	19990407	(199918)	EN			<--
							<--
US 6077989	A	20000620	(200035)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9745147 A1		WO 1997-CA331	19970515
US 6077989 A	Provisional	US 1996-18525P	19960528
AU 9727593 A		AU 1997-27593	19970515
EP 906128 A1		EP 1997-921549	19970515
EP 906128 A1		WO 1997-CA331	19970515
US 6077989 A		WO 1997-CA331	19970515
US 6077989 A		US 1998-194159	19981123

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9727593 A	Based on	WO 9745147 A
EP 906128 A1	Based on	WO 9745147 A
US 6077989 A	Based on	WO 9745147 A

PRIORITY APPLN. INFO: US 1996-18525P 19960528
US 1998-194159 19981123
AN 1998-032344 [199803] WPIX
AB WO 1997045147 A1 UPAB: 20050827
Resorbable biomaterial for implantation comprises crystalline condensed calcium metaphosphate or pyrophosphate of formula [Ca(PO3)2)]n (I), where n is at least 3 and the molar ratio of Ca:P is 0.4-0.6. Also claimed are an implant for use in connecting soft and hard connective tissues and the treatment of deficient hard and soft tissue attachment by use of the above implant.
USE - The porous structure of the biomaterial allows attachment of soft to hard tissue. The implant is used as an anchor, connector or structure to repair damaged or malformed connective tissues, to allow repair of bone areas subject to high stress or as a screw, pin or staple. The material can be used as a supporting surface for soft connective tissue formation and as a scaffold, to guide ingrowth of bone cells and anchor the soft tissues to the bone. Generally, the implant is of use in bone reconstruction, replacement and

augmentation, in cosmetic surgery, particularly to reconstruct facial bones, in osteosynthesis, to produce an in vivo splint, to repair or replace localised regions of degenerate or damaged soft connective tissues for reattachment to bone, and in dentistry.
ADVANTAGE - The use of resorbable implants overcomes disadvantages associated with prior art methods e.g. the slow degradation of hydroxyapatite implants in the body or the premature loss of strength or stiffness in fibrous material due to fibre degradation. The resorbable biomaterial does not produce a fibrotic or cellular reaction. The biomaterial degrades and leaves in its place, a bone-soft tissue complex that is well bonded, increasing the natural soft/hard tissue junction which is suitable for load bearing.

L12 ANSWER 156 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-402277 [199737] WPIX
DOC. NO. CPI: C1997-129714 [199737]
DOC. NO. NON-CPI: N1997-334629 [199737]
TITLE: Medical implant with oxidisable surface and biocompatible coating - carries bonded bio-active molecules to encourage growth of tissue around it in situ
DERWENT CLASS: B07; D22; P32; P34
INVENTOR: SUBRAMANIAM R
PATENT ASSIGNEE: (SURF-N) SURFACE GENESIS INC
COUNTRY COUNT: 24

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9727821	A1	19970807	(199737)*	EN	17[9]		<--
AU 9717096	A	19970822	(199801)	EN			<--
EP 877583	A1	19981118	(199850)	EN			<--
US 5861032	A	19990119	(199911)	EN			<--
AU 723348	B	20000824	(200045)	EN			<--
JP 2001505068	W	20010417	(200128)	JA	17		<--
IL 125618	A	20040208	(200415)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9727821 A1		WO 1997-US1186	19970124
US 5861032 A		US 1996-594872	19960131
AU 9717096 A		AU 1997-17096	19970124
AU 723348 B		AU 1997-17096	19970124
EP 877583 A1		EP 1997-903108	19970124
IL 125618 A		IL 1997-125618	19970124
JP 2001505068 W		JP 1997-527734	19970124
AU 9717096 A		WO 1997-US1186	19970124
EP 877583 A1		WO 1997-US1186	19970124
JP 2001505068 W		WO 1997-US1186	19970124

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 723348 B	Previous Publ	AU 9717096 A
AU 9717096 A	Based on	WO 9727821 A
EP 877583 A1	Based on	WO 9727821 A
AU 723348 B	Based on	WO 9727821 A
JP 2001505068 W	Based on	WO 9727821 A
IL 125618 A	Based on	WO 9727821 A

PRIORITY APPLN. INFO: US 1996-594872 19960131
AN 1997-402277 [199737] WPIX
AB WO 1997027821 A1 UPAB: 20060113
Medical device (I) for implantation into the tissues of a human body comprises: (a) a support composed of a material substantially compatible with tissue and capable of oxidation; (b) an organic linker (II) oxidatively coupled to the surface of the support carrying a reactive function; and (c) a bioactive agent (III) bonded to the linker via the reactive function. Also claimed is a method for coupling a bioactive agent to a medical device having a biocompatible coating, by (a) removing any oxide present on the surface of the device, (b) placing an organic linker in contact with the surface to form an oxidative coupling and (c) attaching a bioactive agent to the surface of the foreign body by reaction with the organic linker.
USE - (I) is particularly a cardiovascular device including defibrillator, implantable defibrillator leads, pacemaker and pacemaker leads, artificial heart valve, LVAD, stent (claimed), stent graft, soft tissue implant device including implantable pump, implantable lead, cochlear implant, implant for reconstructive surgery, urinary continence, penile and breast implant (claimed), and surgical aid including sutures, vascular occlusion device and surgical supplies.
ADVANTAGE - The organic linker provides a method of binding a bioactive agent more securely to the support, overcoming previous difficulties of e.g. flaking, by confining the binding reaction to the support to one of oxidation whilst providing a number of methods for binding the bioactive agent to the linker.

Member(0004)
ABEQ US 5861032 A UPAB 20060113
Medical device (I) for implantation into the tissues of a human body comprises: (a) a support composed of a material substantially compatible with tissue and capable of oxidation; (b) an organic linker (II) oxidatively coupled to the surface of the support carrying a reactive function; and (c) a bioactive agent (III) bonded to the linker via the reactive function.
Also claimed is a method for coupling a bioactive agent to a medical device having a biocompatible coating, by (a) removing any oxide present on the surface of the device, (b) placing an organic linker in contact with the surface to form an oxidative coupling and (c) attaching a bioactive agent to the surface of the foreign body by reaction with the organic linker.
USE - (I) is particularly a cardiovascular device including defibrillator, implantable defibrillator leads, pacemaker and pacemaker leads, artificial heart valve, LVAD, stent (claimed), stent graft, soft tissue implant device including implantable pump, implantable lead, cochlear implant, implant for reconstructive surgery, urinary continence, penile and breast implant (claimed), and surgical aid including sutures, vascular occlusion device and surgical supplies.

ADVANTAGE - The organic linker provides a method of binding a bioactive agent more securely to the support, overcoming previous difficulties of e.g. flaking, by confining the binding reaction to the support to one of oxidation whilst providing a number of methods for binding the bioactive agent to the linker.

L12 ANSWER 157 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-385331 [199735] WPIX
DOC. NO. CPI: C1997-123605 [199735]
TITLE: Isolated precursor cells for promoting bone and cartilage regeneration - derived from peripheral blood, adipose tissue or bone marrow, also implants seeded with them to improve integration
DERWENT CLASS: B04; D16
INVENTOR: NOUSEK-GOEBL N; NOUSEKGOEBL N; PETERSON D R
PATENT ASSIGNEE: (BOEF-C) BOEHRINGER MANNHEIM CORP; (JOHJ-C) DEPUY ORTHOPAEDICS INC
COUNTRY COUNT: 20

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9726326	A1	19970724	(199735)*	EN	74[0]		<--
EP 877795	A1	19981118	(199850)	EN			<--
JP 2000503542	W	20000328	(200026)	JA	38		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9726326 A1		WO 1997-US1213	19970113
EP 877795 A1		EP 1997-903115	19970113
JP 2000503542 W		JP 1997-526312	19970113
EP 877795 A1		WO 1997-US1213	19970113
JP 2000503542 W		WO 1997-US1213	19970113

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 877795 A1	Based on	WO 9726326 A
JP 2000503542 W	Based on	WO 9726326 A

PRIORITY APPLN. INFO: US 1996-587315 19960116
AN 1997-385331 [199735] WPIX
AB WO 1997026326 A1 UPAB: 20060113
Precursor cells (PC) for use in connective tissue formation are isolated by: (a) treating peripheral blood containing PC with a reagent (lectin or attachment molecule) that binds to a cell surface marker on PC (i.e. CD34 or other antigen present on CD34+ cells), and (b) separating the cell-reagent complex formed. Also claimed are:
(1) a negative selection method for isolating PC, using a reagent that binds to a marker not found on CD34+ cells; (2) populations of PC with osteogenic and chondrogenic potential isolated: (a) from peripheral blood or adipose tissue or (b) from marrow without an in vitro culture stage, optionally formulated with a carrier;

(3) a clinically implantable device in which ≥ 1 surface is seeded with PC, and
(4) producing connective tissue regeneration in mammals using a subset of nucleated cells isolated from peripheral blood, adipose tissue or bone marrow.
USE - The PC-reagent complexes, PC taken directly from adipose tissue or PC-seeded implants are used to promote mammalian bone and cartilage regeneration in vivo. The cell-reagent complexes are administered to the site surgically or by arthroscopic injection.
ADVANTAGE - PC can be used without a lengthy in vitro culture step and devices seeded with PC have improved implantability. Autologous PC can now be isolated simply and quickly for immediate in vivo transplantation. Peripheral blood and adipose tissue represent new and convenient sources of PC which are easier to collect than marrow or periosteum.

L12 ANSWER 158 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-319435 [199729] WPIX
DOC. NO. CPI: C1997-103092 [199729]
DOC. NO. NON-CPI: N1997-264469 [199729]
TITLE: Hollow tube brachytherapy device - with improved safety, provides a uniform radiation field and is better attached to tissues, reducing risk of migration
DERWENT CLASS: A96; B07; K08; P34; P56; S05
INVENTOR: CONIGLIONE R
PATENT ASSIGNEE: (CONI-I) CONIGLIONE R; (IBTT-N) IBT TECHNOLOGY PARTNERS; (ITBR-N) INT BRACHYTHERAPY SA
COUNTRY COUNT: 73

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9719724	A1	19970605	(199729)*	EN	32[5]		<--
AU 9716827	A	19970619	(199741)	EN			<--
US 5713828	A	19980203	(199812)	EN	14[5]		<--
EP 874665	A1	19981104	(199848)	EN			<--
BR 9611774	A	19990223	(199913)	PT			<--
CN 1202834	A	19981223	(199919)	ZH			<--
JP 2000502265	W	20000229	(200022)	JA	53		<--
HU 9903672	A2	20000328	(200025)	HU			<--
KR 99071696	A	19990927	(200048)	KO	[8]		<--
US 6163947	A	20001226	(200103)	EN			<--
US 20010005930	A1	20010705	(200139)	EN			<--
US 6347443	B2	20020219	(200221)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 9719724 A1	WO 1996-US19109 19961125
US 5713828 A	US 1995-563050 19951127
US 6163947 A CIP of	US 1995-563050 19951127
US 20010005930 A1 CIP of	US 1995-563050 19951127
US 6347443 B2 CIP of	US 1995-563050 19951127
BR 9611774 A	BR 1996-11774 19961125
CN 1202834 A	CN 1996-198602 19961125
EP 874665 A1	EP 1996-945566 19961125
EP 874665 A1	WO 1996-US19109 19961125
BR 9611774 A	WO 1996-US19109 19961125
JP 2000502265 W	WO 1996-US19109 19961125
HU 9903672 A2	WO 1996-US19109 19961125
KR 99071696 A	WO 1996-US19109 19961125
US 6163947 A Cont of	WO 1996-US19109 19961125
US 20010005930 A1 CIP of	WO 1996-US19109 19961125
US 6347443 B2 Cont of	WO 1996-US19109 19961125
AU 9716827 A	AU 1997-16827 19961125
JP 2000502265 W	JP 1997-520712 19961125
US 6163947 A	US 1997-903850 19970731
US 20010005930 A1 Div Ex	US 1997-903850 19970731
US 6347443 B2 Div Ex	US 1997-903850 19970731
KR 99071696 A	KR 1998-703973 19980527
HU 9903672 A2	HU 1999-3672 19961125
US 20010005930 A1	US 2000-747800 20001222
US 6347443 B2	US 2000-747800 20001222

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6163947 A	CIP of	US 5713828 A
US 20010005930 A1	CIP of	US 5713828 A
US 6347443 B2	CIP of	US 5713828 A
US 20010005930 A1	Div ex	US 6163947 A
US 6347443 B2	Div ex	US 6163947 A
AU 9716827 A	Based on	WO 9719724 A
EP 874665 A1	Based on	WO 9719724 A
BR 9611774 A	Based on	WO 9719724 A
JP 2000502265 W	Based on	WO 9719724 A
HU 9903672 A2	Based on	WO 9719724 A
KR 99071696 A	Based on	WO 9719724 A

PRIORITY APPLN. INFO: US 1995-563050 19951127
WO 1996-US19109 19961125
US 1997-903850 19970731
US 2000-747800 20001222

AN 1997-319435 [199729] WPIX

AB WO 1997019724 A1 UPAB: 20060113
A brachytherapy device for implanting radiation-emitting material within a living body comprises (a) a tubular support having two open ends; (b) radiation-emitting material on external surface of the support; and (c) means to sealingly encase the radiation-emitting material to prevent contact between bodily fluids and the radioactive material. Also claimed are similar devices comprising (1)(a') a hollow tube-shaped seed substrate (HTS) having two open ends and pierced by a number of perforations; and (b) and (c) as above; and (2) (a') a tubular support having a lumenal surface and an external surface and two open ends; (b) and (c) as above; (d) fixing means (suture material or rigid surgical fixative rods) which can be passed through the hollow tube so

as to fixedly locate the tube, where the device is fixedly locatable relative to other similar devices, relative to the tumour to be treated or relative to the treatment volume to be irradiated. Also claimed is a precursor device adapted to be transmuted into a brachytherapy device comprising a HTS having two open ends and a layer of an isotope (gold-197, iridium-191, palladium-102, phosphorus-31 or yttrium-89) on an outer surface; and means to sealingly encase the isotope to prevent contact with bodily fluids and to yield a sealed precursor device. Also claimed is the use of devices by inserting surgical wire or surgical plastic filament through the lumen of the device, attaching the device to a catheter, and inserting the catheter into the patient.
USE - The devices are useful for interstitial radiotherapy of e.g. malignant neoplasms, and can also be used for emplacement of vessels in the body, e.g. to inhibit restenosis of blood vessels. The hollow tube design allows a suture material, rigid rod or other biocompatible connecting member to be passed through to fix its position relative to other similar devices. The threaded connecting member can also serve to locate the device relative to the treatment volume. The hollow tube design also allows growth of tissue into the device, anchoring it and reducing the risk of migration.
ADVANTAGE - Compared with prior art, the design promotes simple and efficient interaction between the device and suture materials commonly used in surgery; the process of applying the device is easier and quicker; the accuracy of emplacement is improved; and hazards to medical personnel are reduced.

Member(0003)
ABEQ US 5713828 A UPAB 20060113
A brachytherapy device for implanting radiation-emitting material within a living body comprises (a) a tubular support having two open ends; (b) radiation-emitting material on external surface of the support; and (c) means to sealingly encase the radiation-emitting material to prevent contact between bodily fluids and the radioactive material. Also claimed are similar devices comprising (1)(a') a hollow tube-shaped seed substrate (HTS) having two open ends and pierced by a number of perforations; and (b) and (c) as above; and (2) (a') a tubular support having a lumenal surface and an external surface and two open ends; (b) and (c) as above; (d) fixing means (suture material or rigid surgical fixative rods) which can be passed through the hollow tube so as to fixedly locate the tube, where the device is fixedly locatable relative to other similar devices, relative to the tumour to be treated or relative to the treatment volume to be irradiated. Also claimed is a precursor device adapted to be transmuted into a brachytherapy device comprising a HTS having two open ends and a layer of an isotope (gold-197, iridium-191, palladium-102, phosphorus-31 or yttrium-89) on an outer surface; and means to sealingly encase the isotope to prevent contact with bodily fluids and to yield a sealed precursor device. Also claimed is the use of devices by inserting surgical wire or surgical plastic filament through the lumen of the device, attaching the device to a catheter, and inserting the catheter into the patient.

USE - The devices are useful for interstitial radiotherapy of e.g. malignant neoplasms, and can also be used for emplacement of vessels in the body, e.g. to inhibit restenosis of blood vessels. The hollow tube design allows a suture material, rigid rod or other biocompatible connecting member to be passed through to fix its position relative to other similar devices. The threaded connecting member can also serve to locate the device relative to the treatment volume. The hollow tube design also allows growth of tissue into the device, anchoring it and reducing the risk of migration.

ADVANTAGE - Compared with prior art, the design promotes simple and efficient interaction between the device and suture materials commonly used in surgery; the process of applying the device is easier and quicker; the accuracy of emplacement is improved; and hazards to medical personnel are reduced.

Member(0010)
ABEQ US 6163947 A UPAB 20060113
A brachytherapy device for implanting radiation-emitting material within a living body comprises (a) a tubular support having two open ends; (b) radiation-emitting material on external surface of the support; and (c) means to sealingly encase the radiation-emitting material to prevent contact between bodily fluids and the radioactive material. Also claimed are similar devices comprising (1)(a') a hollow tube-shaped seed substrate (HTS) having two open ends and pierced by a number of perforations; and (b) and (c) as above; and (2) (a') a tubular support having a lumenal surface and an external surface and two open ends; (b) and (c) as above; (d) fixing means (suture material or rigid surgical fixative rods) which can be passed through the hollow tube so as to fixedly locate the tube, where the device is fixedly locatable relative to other similar devices, relative to the tumour to be treated or relative to the treatment volume to be irradiated. Also claimed is a precursor device adapted to be transmuted into a brachytherapy device comprising a HTS having two open ends and a layer of an isotope (gold-197, iridium-191, palladium-102, phosphorus-31 or yttrium-89) on an outer surface; and means to sealingly encase the isotope to prevent contact with bodily fluids and to yield a sealed precursor device. Also claimed is the use of devices by inserting surgical wire or surgical plastic filament through the lumen of the device, attaching the device to a catheter, and inserting the catheter into the patient.
USE - The devices are useful for interstitial radiotherapy of e.g. malignant neoplasms, and can also be used for emplacement of vessels in the body, e.g. to inhibit restenosis of blood vessels. The hollow tube design allows a suture material, rigid rod or other biocompatible connecting member to be passed through to fix its position relative to other similar devices. The threaded connecting member can also serve to locate the device relative to the treatment volume. The hollow tube design also allows growth of tissue into the device, anchoring it and reducing the risk of migration.
ADVANTAGE - Compared with prior art, the design promotes simple and efficient interaction between the device and suture materials commonly used in surgery; the process of applying the device is easier and quicker; the accuracy of emplacement is improved; and hazards to medical personnel are reduced.

Member(0011)
ABEQ US 20010005930 A1 UPAB 20060113
A brachytherapy device for implanting radiation-emitting material within a living body comprises (a) a tubular support having two open ends; (b) radiation-emitting material on external surface of the support; and (c) means to sealingly encase the radiation-emitting material to prevent contact between bodily fluids and the radioactive material. Also claimed are similar devices comprising (1)(a') a hollow tube-shaped seed substrate (HTS) having two open ends and pierced by a number of perforations; and (b) and (c) as above; and (2) (a') a tubular support having a lumenal surface and an external surface and two open ends; (b) and (c)

as above; (d) fixing means (suture material or rigid surgical fixative rods) which can be passed through the hollow tube so as to fixedly locate the tube, where the device is fixedly locatable relative to other similar devices, relative to the tumour to be treated or relative to the treatment volume to be irradiated. Also claimed is a precursor device adapted to be transmuted into a brachytherapy device comprising a HTS having two open ends and a layer of an isotope (gold-197, iridium-191, palladium-102, phosphorus-31 or yttrium-89) on an outer surface; and means to sealingly encase the isotope to prevent contact with bodily fluids and to yield a sealed precursor device. Also claimed is the use of devices by inserting surgical wire or surgical plastic filament through the lumen of the device, attaching the device to a catheter, and inserting the catheter into the patient.

USE - The devices are useful for interstitial radiotherapy of e.g. malignant neoplasms, and can also be used for emplacement of vessels in the body, e.g. to inhibit restenosis of blood vessels. The hollow tube design allows a suture material, rigid rod or other biocompatible connecting member to be passed through to fix its position relative to other similar devices. The threaded connecting member can also serve to locate the device relative to the treatment volume. The hollow tube design also allows growth of tissue into the device, anchoring it and reducing the risk of migration.

ADVANTAGE - Compared with prior art, the design promotes simple and efficient interaction between the device and suture materials commonly used in surgery; the process of applying the device is easier and quicker; the accuracy of emplacement is improved; and hazards to medical personnel are reduced.

L12 ANSWER 159 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-064345 [199706] WPIX
DOC. NO. CPI: C1997-021154 [199706]
DOC. NO. NON-CPI: N1997-052982 [199706]
TITLE: Orbital implant for use after evisceration or enucleation of eye - includes hydroxyl-apatite granules embedded in bio-compatible polymeric core configured to fit within an orbital cavity
DERWENT CLASS: A96; D22; P32
INVENTOR: MARTINEZ M
PATENT ASSIGNEE: (MART-I) MARTINEZ M
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 5584880	A	19961217	(199706)*	EN	11[12]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5584880	A	US 1994-234039	19940428

PRIORITY APPLN. INFO: US 1994-234039 19940428
AN 1997-064345 [199706] WPIX
AB US 5584880 A UPAB: 20050515
An orbital implant for use after evisceration or enucleation of an eye comprises a core and at least one or a plurality of porous hydroxylapatite

granules mounted on the core in spaced relation to promote tissue ingrowth between them, the hydroxylapatite granules and core between them defining an outer surface configured to fit within an orbital cavity. A synthetic, porous covering surrounding the core and hydroxylapatite granules may be present to provide a surface for anchoring eye tissue to the orbital implant. A spherical core may have at least one cavity formed in it with at least one hydroxylapatite granule mounted in the cavity. A protrusion may extend radially from the core to couple with an artificial eye.
USE - The implant with hydroxylapatite is used after evisceration, enucleation (both claimed) or sec. implantation.
ADVANTAGE - The hydroxylapatite granules promote incorporation of the implant into the fibro-vascular tissue of the eye. Effective use is made of the expensive hydroxylapatite granules to reduce the cost of the prosthetic system cf. conventional all-hydroxylapatite systems. Fewer hydroxylapatitle granules also leads to reduced in vivo fluid retention. Irregularly-shaped granules may be used as they are embedded in the core, thus reducing machining costs. Attachment of the implant to the eye muscles via the covering eliminates the need for complicated suturing techniques. Having a protrusion formed as an integral part of the implant to couple with an artificial eye obviates the need for a 2nd surgical procedure to fit the artificial eye. The implant is easy to insert and the artificial eye is easy to fit after insertion. No bonding agents are used.

L12 ANSWER 160 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN

ACCESSION NUMBER:	1996-465171 [199646] WPIX
CROSS REFERENCE:	1996-497228; 1997-012221; 1997-332592; 1997-332937; 1999-404428; 1995-270695
DOC. NO. CPI:	C1996-146150 [199646]
DOC. NO. NON-CPI:	N1996-391657 [199646]
TITLE:	Free radical polymerisable macromer for implants or contact lenses - comprises opt. symmetrically substd. per:fluoroalkyl ether*, for polymerisation prod. polymer of siloxane* macromer for improved properties
DERWENT CLASS:	A14; A25; A26; A96; D22; E19; P32; P34; P81; U11; U12; U13
INVENTOR:	BARON R C; CHABRECEK P; COURT J; DOMSCHKE A; DOSCHKE A; GRIESSER H J; HIPKEN J; HO A; HOEPKEN J; HOHEN J; HOPKEN J; LAYCOCK B G; LIU Q; LOHMANN D; MEIJS G F; NICOLSON P C; PAPASIPILIOTOPOULOS E; PAPASPILIOTOPOULOS E; RIFFLE J S; SCHINDHELM K; SWEENEY D; TERRY W L; VOGT J; WINTERTON L C; HOPKINS J; SHINDHELM K
PATENT ASSIGNEE:	(CIBA-C) CIBA GEIGY AG; (CIBA-C) CIBA VISION CORP; (CSIR-C) COMMONWEALTH SCI & IND RES ORG; (NOVS-C) NOVARTIS AG; (NOVS-C) NOVARTIS-ERFINDUNGEN VERW GES MBH; (NOVS-C) NOVARTIS-ERFUINDUNGEN VERWALTUNGS GMBH; (CSIR-C) COMMONWEALTH SCI&IND RES ORG
COUNTRY COUNT:	64

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9631791	A1	19961010	(199646)*	EN	46[0]		<--
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ZA 9602656	A	19961129	(199702)	EN	123[0]		<--
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AU 9651475	A	19961023	(199707)	EN			<--
							<--

ZA 9602655	A	19970226	(199714)	EN	46[0]
NO 9704584	A	19971126	(199807)	NO	
EP 820601	A1	19980128	(199809)	EN	
CZ 9703108	A3	19980318	(199817)	CS	
BR 9604817	A	19980609	(199831)	PT	
US 5789461	A	19980804	(199838)	EN	
HU 9801570	A2	19981130	(199903)	HU	
SK 9701336	A3	19981202	(199907)	SK	
NZ 304318	A	19990329	(199918)	EN	
JP 11502894	W	19990309	(199920)	JA	54
AU 703193	B	19990318	(199923)	EN	
MX 9707554	A1	19971201	(199936)	ES	
US 5945498	A	19990831	(199942)	EN	
KR 98703577	A	19981105	(199954)	KO	
EP 820601	B1	19991222	(200004)	EN	
DE 69605780	E	20000127	(200012)	DE	
ES 2142574	T3	20000416	(200026)	ES	
US 5789461	B1	20001121	(200067)	EN	
IL 117697	A	20010111	(200107)	EN	
TW 393498	A	20000611	(200108)	ZH	
DE 29624309	U1	20020103	(200210)	DE	
MX 198027	B	20000809	(200216)	ES	
CN 1180415	A	19980429	(200234)	ZH	
AU 747782	B	20020523	(200245)#	EN	
TW 464660	A	20011121	(200248)	ZH	
AU 2002300702	A1	20030220	(200427)#	EN	
CN 1135403	C	20040121	(200579)	ZH	
PH 1199652776	B1	20040315	(200620)	EN	
CN 1192251	C	20050309	(200634)	ZH	
AU 2002300702	B2	20051215	(200654)#	EN	
CA 2213357	C	20070508	(200733)	EN	
JP 3967377	B2	20070829	(200757)	JA	25
NO 324788	B1	20071210	(200801)	NO	
JP 2009003449	A	20090108	(200906)	JA	215

US 20090046242 A1 20090219 (200920) EN
JP 2010020330 A 20100128 (201009) JA 217

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9631791 A1		WO 1996-EP1255	19960322
US 5789461 A CIP of		US 1994-301166	19940906
US 5789461 B1 CIP of		US 1994-301166	19940906
US 20090046242 A1 CIP of		US 1994-301166	19940906
TW 393498 A		TW 1995-108480	19950815
US 5789461 A Div Ex		US 1995-569816	19951208
US 5789461 B1 Div Ex		US 1995-569816	19951208
US 20090046242 A1 Div Ex		US 1995-569816	19951208
AU 9651475 A		AU 1996-51475	19960322
AU 703193 B		AU 1996-51475	19960322
AU 747782 B Div Ex		AU 1996-51478	19960322
BR 9604817 A		BR 1996-4817	19960322
CA 2213357 C		CA 1996-2213357	19960322
CN 1180415 A		CN 1996-192990	19960322
CN 1135403 C		CN 1996-192990	19960322
CN 1192251 C		CN 1996-193004	19960322
DE 29624309 U1		DE 1996-29624309	19960322
DE 69605780 E		DE 1996-69605780	19960322
EP 820601 A1		EP 1996-908111	19960322
EP 820601 B1		EP 1996-908111	19960322
DE 69605780 E		EP 1996-908111	19960322
ES 2142574 T3		EP 1996-908111	19960322
DE 29624309 U1 Application No		EP 1996-908116	19960322
JP 11502894 W		JP 1996-529925	19960322
JP 3967377 B2		JP 1996-529925	19960322
JP 2009003449 A Div Ex		JP 1996-529931	19960322
NZ 304318 A		NZ 1996-304318	19960322
NO 9704584 A PCT Application		WO 1996-EP1255	19960322
EP 820601 A1 PCT Application		WO 1996-EP1255	19960322
CZ 9703108 A3 PCT Application		WO 1996-EP1255	19960322
BR 9604817 A PCT Application		WO 1996-EP1255	19960322
HU 9801570 A2 PCT Application		WO 1996-EP1255	19960322
SK 9701336 A3 PCT Application		WO 1996-EP1265	19960322
NZ 304318 A PCT Application		WO 1996-EP1255	19960322
JP 11502894 W PCT Application		WO 1996-EP1255	19960322
US 5945498 A PCT Application		WO 1996-EP1255	19960322
KR 98703577 A PCT Application		WO 1996-EP1255	19960322
EP 820601 B1 PCT Application		WO 1996-EP1255	19960322
DE 69605780 E PCT Application		WO 1996-EP1255	19960322
CA 2213357 C PCT Application		WO 1996-EP1255	19960322
JP 3967377 B2 PCT Application		WO 1996-EP1255	19960322
NO 324788 B1 PCT Application		WO 1996-EP1255	19960322
TW 464660 A		TW 1996-103599	19960326
IL 117697 A		IL 1996-117697	19960328
PH 1199652776 B1		PH 1996-52776	19960401
ZA 9602655 A		ZA 1996-2655	19960403
ZA 9602656 A		ZA 1996-2656	19960403
US 20090046242 A1 Div Ex		US 1996-682452	19960717
US 5789461 A		US 1996-683491	19960718
US 5789461 B1		US 1996-683491	19960718
CZ 9703108 A3		CZ 1997-3108	19960322
MX 198027 B		MX 1997-7554	19960322

SK 9701336 A3	SK 1997-1336 19960322
MX 9707554 A1	MX 1997-7554 19971002
NO 9704584 A	NO 1997-4584 19971003
NO 324788 B1	NO 1997-4584 19971003
KR 98703577 A	KR 1997-706981 19971004
US 5945498 A	US 1997-776985 19971222
HU 9801570 A2	HU 1998-1570 19960322
US 20090046242 A1 Cont of	US 1998-108714 19980701
US 20090046242 A1 Cont of	US 1999-262542 19990304
AU 747782 B	AU 1999-35828 19990622
AU 2002300702 A1 Div Ex	AU 1999-35828 19990622
AU 2002300702 B2 Div Ex	AU 1999-35828 19990622
US 20090046242 A1 Cont of	US 2000-640526 20000817
AU 2002300702 A1	AU 2002-300702 20020821
AU 2002300702 B2	AU 2002-300702 20020821
US 20090046242 A1 Cont of	US 2005-146586 20050607
US 20090046242 A1 Cont of	US 2006-618798 20061230
JP 2009003449 A	JP 2008-152780 20080611
US 20090046242 A1	US 2008-252397 20081016
JP 2010020330 A Div Ex	JP 2008-152780 20080611
JP 2010020330 A	JP 2009-191836 20090821

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 703193	B	Previous Publ	AU 9651475	A
AU 747782	B	Previous Publ	AU 9935828	A
AU 747782	B	Div ex	AU 704749	B
DE 69605780	E	Based on	EP 820601	A
ES 2142574	T3	Based on	EP 820601	A
JP 3967377	B2	Previous Publ	JP 11502894	W
NO 324788	B1	Previous Publ	NO 9704584	A
AU 9651475	A	Based on	WO 9631791	A
EP 820601	A1	Based on	WO 9631791	A
CZ 9703108	A3	Based on	WO 9631791	A
BR 9604817	A	Based on	WO 9631791	A
HU 9801570	A2	Based on	WO 9631791	A
NZ 304318	A	Based on	WO 9631791	A
JP 11502894	W	Based on	WO 9631791	A
AU 703193	B	Based on	WO 9631791	A
US 5945498	A	Based on	WO 9631791	A
KR 98703577	A	Based on	WO 9631791	A
EP 820601	B1	Based on	WO 9631791	A
DE 69605780	E	Based on	WO 9631791	A
CA 2213357	C	Based on	WO 9631791	A
JP 3967377	B2	Based on	WO 9631791	A
US 20090046242	A1	Div Ex	US 5760100	A
US 20090046242	A1	Div Ex	US 5849811	A
US 20090046242	A1	Cont of	US 5965631	A
US 20090046242	A1	Cont of	US 6951894	B
US 20090046242	A1	Cont of	US 7468398	B

PRIORITY APPLN. INFO:	US 1995-569816	19951208
	EP 1995-810221	19950404
	CH 1995-1476	19950518
	US 1994-301166	19940906
	CH 1995-1496	19950519
	WO 1996-EP1255	19960322

US 1996-683491	19960718
AU 1999-35828	19990622
AU 2002-300702	20020821
EP 1995-810021	19950404

AN 1996-465171 [199646] WPIX
CR 1996-497228; 1997-012221; 1997-332592; 1997-332937; 1999-404428; 1995-270695
AB WO 1996031791 A1 UPAB: 20060131
A macromer of formula (I) is new:
P1-(Y)m-(L-X1)p-Q-(X1-L)p-(Y)m-P1 (I) P1 = free radical polymerisable gp.; Y = - CONHCOO-, -CONHCONH-, -OCONHCO-, -NHCONHCO-, -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO-, -OCONH-; m, p = 0 or 1.
L = divalent radical of 20 C organic cpd; X1 = -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO-, -OCONH-; and Q = bivalent polymer fragment comprising: (a)' -(E)k-Z-CF2-(OCF2)x-(OCF2CF2)y-OCF2-Z-(E)h, x + y = 10 - 30;
Z = 12C divalent radical or a bond; E = -(OCH2CH2)q;
q = 0 - 2;
-Z-E = -Z-(OCH2CH2)q-; and
k = 0 or 1;
(b)' -Alk-Si(R1)(R2)-[O-Si(R3)(R4)-]n-Alk- n = 5-100;
Alk = 20 C alkylene;
80-100% of the radicals R1, R2, R3, R4 = alkyl; and 0-20% of the radicals R1, R2, R3, R4 = alkenyl, aryl or cyanoalkyl; and (c)' X1-R-X2
R = 20 C divalent organic radical;
X1 = -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO- or -OCONH-; provided that each segment (a)' or (b)' has a segment (c)' attached and each segment (c)' has a segment (a)' or (b)' attached. Also claimed are:
(i) preparation of a macromer of formula (I); (ii) a polymer;
(iii) a crosslinked polymer;
(iv) a polymer comprising the polymerisation prod. of the macromonomer, a hydrophobic monomer and a hydrophilic monomer; (v) a moulding;
(vi) a moulding comprising the polymer of a polymerisation prod.; (vii) the use of a macromer for the production of a corneal implant, a cell-growth substrate or a medical implant; (viii) a biomedical article; and
(ix) a corneal implant of formula (I).
USE - Used for e.g. mouldings, contact lenses, corneal implants, biomedical articles and articles coated with the macromer (claimed).
ADVANTAGE - The material is free from undesirable properties.

Member(0009)
ABEQ US 5789461 A UPAB 20060131
A macromer of formula (I) is new:
P1-(Y)m-(L-X1)p-Q-(X1-L)p-(Y)m-P1 (I)
P1 = free radical polymerisable gp.;
Y = - CONHCOO-, -CONHCONH-, -OCONHCO-, -NHCONHCO-, -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO-, -OCONH-;
m, p = 0 or 1.
L = divalent radical of 20 C organic cpd;
X1 = -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO-, -OCONH-; and
Q = bivalent polymer fragment comprising:
(a)' -(E)k-Z-CF2-(OCF2)x-(OCF2CF2)y-OCF2-Z-(E)h,
x + y = 10 - 30;
Z = 12C divalent radical or a bond;
E = -(OCH2CH2)q;
q = 0 - 2;
-Z-E = -Z-(OCH2CH2)q-; and
k = 0 or 1;
(b)' -Alk-Si(R1)(R2)-[O-Si(R3)(R4)-]n-Alk-

n = 5-100;
Alk = 20 C alkylene;
80-100% of the radicals R1, R2, R3, R4 = alkyl; and
0-20% of the radicals R1, R2, R3, R4 = alkenyl, aryl or cyanoalkyl; and
(c)' X1-R-X2
R = 20 C divalent organic radical;
X1 = -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO- or -OCONH-; provided that each segment (a)' or (b)' has a segment (c)' attached and each segment (c)' has a segment (a)' or (b)' attached.
Also claimed are:
(i) prepn. of a macromer of formula (I);
(ii) a polymer;
(iii) a crosslinked polymer;
(iv) a polymer comprising the polymerisation prod. of the macromonomer, a hydrophobic monomer and a hydrophilic monomer;
(v) a moulding;
(vi) a moulding comprising the polymer of a polymerisation prod.;
(vii) the use of a macromer for the prodn. of a corneal implant, a cell-growth substrate or a medical implant;
(viii) a biomedical article; and
(ix) a corneal implant of formula (I).
USE - Used for e.g. mouldings, contact lenses, corneal implants, biomedical articles and articles coated with the macromer (claimed).
ADVANTAGE - The material is free from undesirable properties.

Member(0016)
ABEQ US 5945498 A UPAB 20060131
A macromer of formula (I) is new:
P1-(Y)m-(L-X1)p-Q-(X1-L)p-(Y)m-P1 (I)
P1 = free radical polymerisable gp.;
Y = - CONHCOO-, -CONHCONH-, -OCONHCO-, -NHCONHCO-, -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO-, -OCONH-;
m, p = 0 or 1.
L = divalent radical of 20 C organic cpd;
X1 = -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO-, -OCONH-; and
Q = bivalent polymer fragment comprising:
(a)' -(E)k-Z-CF2-(OCF2)x-(OCF2CF2)y-OCF2-Z-(E)h,
x + y = 10 - 30;
Z = 12C divalent radical or a bond;
E = -(OCH2CH2)q;
q = 0 - 2;
-Z-E = -Z-(OCH2CH2)q-; and
k = 0 or 1;
(b)' -Alk-Si(R1)(R2)-[O-Si(R3)(R4)-]n-Alk-
n = 5-100;
Alk = 20 C alkylene;
80-100% of the radicals R1, R2, R3, R4 = alkyl; and
0-20% of the radicals R1, R2, R3, R4 = alkenyl, aryl or cyanoalkyl; and
(c)' X1-R-X2
R = 20 C divalent organic radical;
X1 = -NHCO-, -CONH-, -NHCONH-, -COO-, -OCO-, -NHCOO- or -OCONH-; provided that each segment (a)' or (b)' has a segment (c)' attached and each segment (c)' has a segment (a)' or (b)' attached.
Also claimed are:
(i) prepn. of a macromer of formula (I);
(ii) a polymer;
(iii) a crosslinked polymer;
(iv) a polymer comprising the polymerisation prod. of the macromonomer, a

hydrophobic monomer and a hydrophilic monomer;
(v) a moulding;
(vi) a moulding comprising the polymer of a polymerisation prod.;
(vii) the use of a macromer for the prodn. of a corneal implant, a cell-growth substrate or a medical implant;
(viii) a biomedical article; and
(ix) a corneal implant of formula (I).
USE - Used for e.g. mouldings, contact lenses, corneal implants, biomedical articles and articles coated with the macromer (claimed).
ADVANTAGE - The material is free from undesirable properties.

L12 ANSWER 161 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1996-464981 [199646] WPIX
CROSS REFERENCE: 1997-535427; 1997-489588; 1997-489587
DOC. NO. CPI: C1996-146046 [199646]
TITLE: New biocompatible cell growth substrate polymers - obtd. by (co)polymerising perfluorinated polyether derivative macro-monomer, especially used for corneal implants
DERWENT CLASS: A25; A96; B04; D16; D22; P32; P34; P81
INVENTOR: AL M C G E; CHEONG E; GRIFFITHS M C; JOHNSON G; LAYCOCK B G; MEIJS G F; STEELE J G
PATENT ASSIGNEE: (CIBA-C) CIBA GEIGY AG; (CSIR-C) COMMONWEALTH SCI & IND RES ORG; (NOVS-C) NOVARTIS AG
COUNTRY COUNT: 62

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9631548	A1	19961010	(199646)*	EN	47[0]		<--
ZA 9602659	A	19961129	(199702)	EN	43[0]		<--
AU 9651490	A	19961023	(199707)	EN			<--
NO 9704583	A	19971126	(199807)	NO			<--
EP 819141	A1	19980121	(199808)	EN	[0]		<--
BR 9604857	A	19980526	(199827)	PT			<--
JP 11503473	W	19990326	(199923)	JA	52		<--
NZ 304330	A	19990528	(199927)	EN			<--
MX 9707594	A1	19971201	(199936)	ES			<--
AU 707836	B	19990722	(199940)	EN			<--
KR 98703533	A	19981105	(199954)	KO			<--
US 5994133	A	19991130	(200003)	EN			<--
EP 819141	B1	19991222	(200004)	EN			<--
DE 69605778	E	20000127	(200012)	DE			<--

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ES 2141485	T3	20000316	(200021)	ES	<--
					<--
TW 367330	A	19990821	(200033)	ZH	<--
					<--
NO 312036	B1	20020304	(200227)	NO	<--
					<--
CN 1180361	A	19980429	(200234)	ZH	<--
					<--
MX 205178	B	20011113	(200279)	ES	<--
CN 1121430	C	20030917	(200552)	ZH	
JP 3805790	B2	20060809	(200652)	JA 26	
CA 2215138	C	20070424	(200730)	EN	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
WO 9631548 A1		WO 1996-EP1340 19960327
TW 367330 A		TW 1995-108484 19950815
AU 9651490 A		AU 1996-51490 19960327
AU 707836 B		AU 1996-51490 19960327
BR 9604857 A		BR 1996-4857 19960327
CN 1180361 A		CN 1996-192999 19960327
CN 1121430 C		CN 1996-192999 19960327
DE 69605778 E		DE 1996-605778 19960327
EP 819141 A1		EP 1996-908142 19960327
EP 819141 B1		EP 1996-908142 19960327
DE 69605778 E		EP 1996-908142 19960327
ES 2141485 T3		EP 1996-908142 19960327
JP 11503473 W		JP 1996-529948 19960327
JP 3805790 B2		JP 1996-529948 19960327
NZ 304330 A		NZ 1996-304330 19960327
NO 9704583 A		WO 1996-EP1340 19960327
EP 819141 A1		WO 1996-EP1340 19960327
BR 9604857 A		WO 1996-EP1340 19960327
JP 11503473 W		WO 1996-EP1340 19960327
NZ 304330 A		WO 1996-EP1340 19960327
KR 98703533 A		WO 1996-EP1340 19960327
US 5994133 A		WO 1996-EP1340 19960327
EP 819141 B1		WO 1996-EP1340 19960327
DE 69605778 E		WO 1996-EP1340 19960327
NO 312036 B1		WO 1996-EP1340 19960327
JP 3805790 B2		WO 1996-EP1340 19960327
ZA 9602659 A		ZA 1996-2659 19960403
KR 98703533 A		KR 1997-706937 19971002
MX 9707594 A1		MX 1997-7594 19971003
MX 205178 B		MX 1997-7594 19971003
NO 9704583 A		NO 1997-4583 19971003
NO 312036 B1		NO 1997-4583 19971003
US 5994133 A		US 1998-793204 19980106
CA 2215138 C		CA 1996-2215138 19960327
CA 2215138 C		WO 1996-EP1340 19960327

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 707836	B Previous Publ	AU 9651490 A

DE 69605778	E	Based on	EP 819141	A
ES 2141485	T3	Based on	EP 819141	A
JP 3805790	B2	Previous Publ	JP 11503473	W
NO 312036	B1	Previous Publ	NO 9704583	A
AU 9651490	A	Based on	WO 9631548	A
EP 819141	A1	Based on	WO 9631548	A
BR 9604857	A	Based on	WO 9631548	A
JP 11503473	W	Based on	WO 9631548	A
NZ 304330	A	Based on	WO 9631548	A
AU 707836	B	Based on	WO 9631548	A
KR 98703533	A	Based on	WO 9631548	A
US 5994133	A	Based on	WO 9631548	A
EP 819141	B1	Based on	WO 9631548	A
DE 69605778	E	Based on	WO 9631548	A
JP 3805790	B2	Based on	WO 9631548	A
CA 2215138	C	Based on	WO 9631548	A

PRIORITY APPLN. INFO: AU 1995-3025 19950517
AU 1995-2160 19950404
WO 1996-EP1340 19960327

AN 1996-464981 [199646] WPIX

CR 1997-535427; 1997-489588; 1997-489587

AB WO 1996031548 A1 UPAB: 20060112

A novel cell growth substrate polymer (A) is derived from a macromonomer of formula (I):

Q-(PFPE-L)n-1-PFPE-Q (I)

n ≥ 1;

PFPE = (same or different) perfluorinated polyether of formula(II): -OCH2CF2O-(CF2CF2O)x-(CF2O)y-CF2CH2O- (II). CF2CF2O and CF2O units are distributed randomly or as blocks throughout the chain;

x,y - number such that the mol. weight of (II) is 242-4000; L = difunctional linking gp.;

Q (same or different) = polymerisable gp.

USE - The cell growth substrate is used for attachment and growth of animal cells in vitro or in vivo and comprises (A) (opt. in combination with adsorbed or coupled adhesive glycoproteins, especially fibronectin, vitronectin, collagen, laminin or thrombosponden). (A) are especially used for forming corneal implants of the type requiring epithelisation. Ocular prostheses, especially corneal implants or overlays are made from (A). (A) may also be used to form medical implants, artificial organs, tissue culture appts. biological reactors, optical instruments and microscope slides (all claimed). Typically the implants are implantable semipermeable membranes tissue implants for cosmetic surgery, implants containing hormone secreting cells (e.g. pancreatic islet cells), breast implants or artificial joints; tissue culture devices are bottles, trays or dishes; and bio-reactors are used for production of, e.g. proteins by cell culture.

ADVANTAGE - (A) facilitate the adhesion and growth of cells , without the need for additional processing steps. They are biocompatible, bio-stable and not subject to fouling by, e.g. proteins and carbohydrates. They can be prepared with ideal optical transparency and refractive index for use as ocular prostheses. They may be obtd. in porous form to allow the flow of high mol. weight tissue fluid components (important for long term maintenance and viability of anterior and posterior tissue) across a corneal implant,

Member(0012)

ABEQ US 5994133 A UPAB 20060112

A novel cell growth substrate polymer (A) is derived from a macromonomer of formula (I):

Q-(PFPE-L)n-1-PFPE-Q (I)
n ≥ 1;
PFPE = (same or different) perfluorinated polyether of formula(II):
-OCH2CF2O-(CF2CF2O)x-(CF2O)y-CF2CH2O- (II).
CF2CF2O and CF2O units are distributed randomly or as blocks throughout the chain;
x,y - number such that the mol. wt. of (II) is 242-4000;
L = difunctional linking gp.;
Q (same or different) = polymerisable gp.

USE - The cell growth substrate is used for attachment and growth of animal cells in vitro or in vivo and comprises (A) (opt. in combination with adsorbed or coupled adhesive glycoproteins, esp. fibronectin, vitronectin, collagen, laminin or thrombosponden). (A) are esp. used for forming corneal implants of the type requiring epithelisation. Ocular prostheses, esp. corneal implants or overlays are made from (A). (A) may also be used to form medical implants, artificial organs, tissue culture appts. biological reactors, optical instruments and microscope slides (all claimed). Typically the implants are implantable semipermeable membranes tissue implants for cosmetic surgery, implants contg. hormone secreting cells (e.g. pancreatic islet cells), breast implants or artificial joints; tissue culture devices are bottles, trays or dishes; and bio-reactors are used for prodn. of, e.g. proteins by cell culture.

ADVANTAGE - (A) facilitate the adhesion and growth of cells, without the need for additional processing steps. They are biocompatible, bio-stable and not subject to fouling by, e.g. proteins and carbohydrates. They can be prepd. with ideal optical transparency and refractive index for use as ocular prostheses. They may be obtd. in porous form to allow the flow of high mol. wt. tissue fluid components (important for long term maintenance and viability of anterior and posterior tissue) across a corneal implant,

L12 ANSWER 162 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1996-464980 [199646] WPIX
DOC. NO. CPI: C1996-146045 [199646]
DOC. NO. NON-CPI: N1996-391527 [199646]
TITLE: New per:fluoroalkyl ether siloxane macro:monomer cpds. - used to prepare new (co)polymers especially useful in soft contact lenses or corneal implants
DERWENT CLASS: A14; A25; A26; A96; D22; P32; P34; P81
INVENTOR: JOHNSON G; LAYCOCK B G; MEIJS G F; STEELE J G
PATENT ASSIGNEE: (CIBA-C) CIBA GEIGY AG; (CSIR-C) COMMONWEALTH SCI & IND RES ORG; (NOVS-C) NOVARTIS AG
COUNTRY COUNT: 61

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9631547	A1	19961010	(199646)*	EN	29[0]		<--
ZA 9602661	A	19961129	(199702)	EN	27[0]		<--
AU 9651477	A	19961023	(199707)	EN			<--
NO 9704582	A	19971112	(199805)	NO			<--

EP 819140	A1	19980121 (199808)	EN	[0]	<--
					<--
JP 11503183	W	19990323 (199922)	JA	33	<--
					<--
MX 9707591	A1	19971201 (199936)	ES		<--
					<--
EP 819140	B1	20001206 (200064)	EN		<--
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DE 69611161	E	20010111 (200110)	DE		<--
JP 3967378	B2	20070829 (200757)	JA	15	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION DATE
WO 9631547 A1		WO 1996-EP1264 19960322
AU 9651477 A		AU 1996-51477 19960322
DE 69611161 E		DE 1996-611161 19960322
EP 819140 A1		EP 1996-908115 19960322
EP 819140 B1		EP 1996-908115 19960322
DE 69611161 E		EP 1996-908115 19960322
JP 11503183 W		JP 1996-529930 19960322
NO 9704582 A		WO 1996-EP1264 19960322
EP 819140 A1		WO 1996-EP1264 19960322
JP 11503183 W		WO 1996-EP1264 19960322
EP 819140 B1		WO 1996-EP1264 19960322
DE 69611161 E		WO 1996-EP1264 19960322
ZA 9602661 A		ZA 1996-2661 19960403
MX 9707591 A1		MX 1997-7591 19971003
NO 9704582 A		NO 1997-4582 19971003
JP 3967378 B2		JP 1996-529930 19960322
JP 3967378 B2		WO 1996-EP1264 19960322

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 69611161	E	Based on	EP 819140	A
AU 9651477	A	Based on	WO 9631547	A
EP 819140	A1	Based on	WO 9631547	A
JP 11503183	W	Based on	WO 9631547	A
EP 819140	B1	Based on	WO 9631547	A
DE 69611161	E	Based on	WO 9631547	A
JP 3967378	B2	Previous Publ	JP 11503183	W
JP 3967378	B2	Based on	WO 9631547	A

PRIORITY APPLN. INFO: AU 1995-3023 19950517
AU 1995-2162 19950404
WO 1996-EP1264 19960322

AN 1996-464980 [199646] WPIX

AB WO 1996031547 A1 UPAB: 20050514
Perfluorinated polyether-silicone (co)polymer deriv.macromonomers of formula (I) are new. Q-PFPE-L-M-L-PFPE-Q (I). Q = polymerisable gp. (same or different); PFPE = same or different perfluorinated polyether of formula -CH2CF2O(CF2CF2O)x(CF2O)yCF2CH2O-; the CF2CF2O and CF2O units are distributed randomly or as blocks; x, y = numbers such that the mol. weight of PFPE is 242-4000; M = difunctional silicone (co)polymer residue of mol. weight 180-6000 comprising repeating units of formula -O-Si(R1)(R2)-; R1, R2 = H, alkyl, aryl, halo-substd. alkyl or 'the like' (sic). Also claimed are homo- or

copolymers (A) obtd. by (co)polymerising (I) and their production, soft contact lenses of (A) or obtd. from (I) and their production; and corneal implants, cell growth substrates and medical implants of (A).
USE - The use of (I) for mfr. of a soft contact lens, corneal implant, cell growth substrate or medical implant is claimed. Apart from the most preferred. applications in contact lenses and corneal implants. (A) may be used in implantable semipermeable membranes, tissue implants for cosmetic surgery, implants containing hormone secreting cells (e.g. pancreatic islet cells), breast implants, tissue culture bottles, trays or dishes, bioreactors (e.g. for production of proteins by cell culture) or optical instruments. (A) may also be used in soft membrane materials, controlled drug release compsns., gas separation membranes or ion transport membranes.
ADVANTAGE - In soft contact lenses, (A) provide a combination of high oxygen permeability (sufficient to maintain normal corneal physiology) and low modulus (suitable for comfortable extended wear). Modulus is generally 0.5-10 MPa. For corneal implant and other cell growth-related application (A) (although hydrophobic) are suitable for the growth and attachment of cells and outgrowth of corneal tissue. They also have controllable porosity (especially for providing the tissue fluid permeability necessary for long-term maintenance of tissue viability), good biostability, inherent resistance to fouling and suitable mechanical properties for corneal implant use.

L12 ANSWER 163 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1996-384434 [199638] WPIX
CROSS REFERENCE: 2000-271408
DOC. NO. CPI: C1996-121034 [199638]
TITLE: Supporting growth and differentiation of eukaryotic cells in vitro - comprises contacting with cell growth substrate comprising sub-mucosal tissue of warm-blooded vertebrate, useful as transplants and for in vitro characterisation of tumour cells
DERWENT CLASS: B04; D16; P32; P34
INVENTOR: BADYLAK S F; BODER G; CRITSER J; CRITSER J K; DEMETER R J; LIU C; VOYTIK S; VOYTIK-HARBIN S L; SHERRY V
PATENT ASSIGNEE: (BADY-I) BADYLAK S F; (BODE-I) BODER G; (CLAR-N) CLARIAN HEALTH PARTNERS; (ELIL-C) LILLY & CO ELI; (METH-N) METHODIST HEALTH GROUP INC; (METH-N) METHODIST HOSPITAL OF INDIANA INC; (PURD-C) PURDUE RES FOUND; (VOYT-I) VOYTIK S
COUNTRY COUNT: 68

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9624661	A1	19960815	(199638)*	EN	45[2]		<--
							<--
AU 9649210	A	19960827	(199649)	EN			<--
							<--
EP 809691	A1	19971203	(199802)	EN	[1]		<--
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US 5695998	A	19971209	(199804)	EN	7[0]		<--
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US 5753267	A	19980519	(199827)	EN			<--
							<--
JP 10513363	W	19981222	(199910)	JA	36		<--
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US 5866414	A	19990202 (199912)	EN	<--
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AU 719160	B	20000504 (200030)	EN	<--
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US 6087157	A	20000711 (200037)	EN	<--
EP 809691	B1	20031001 (200365)	EN	
DE 69630206	E	20031106 (200381)	DE	
EP 1449916	A2	20040825 (200456)	EN	
JP 2007105031	A	20070426 (200729)	JA	19
JP 4054059	B2	20080227 (200817)	JA	19
JP 4054352	B2	20080227 (200817)	JA	19

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9624661 A1		WO 1996-US1842	19960209
US 5695998 A		US 1995-386452	19950210
US 5753267 A Div Ex		US 1995-386452	19950210
US 5866414 A Cont of		US 1995-386452	19950210
US 6087157 A CIP of		US 1995-386452	19950210
US 5753267 A		US 1995-530001	19950919
US 5866414 A		US 1995-530002	19950919
AU 9649210 A		AU 1996-49210	19960209
AU 719160 B		AU 1996-49210	19960209
DE 69630206 E		DE 1996-69630206	19960209
EP 809691 A1		EP 1996-905458	19960209
EP 809691 B1		EP 1996-905458	19960209
DE 69630206 E		EP 1996-905458	19960209
EP 1449916 A2 Div Ex		EP 1996-905458	19960209
JP 10513363 W		JP 1996-524477	19960209
JP 2007105031 A Div Ex		JP 1996-524477	19960209
EP 809691 A1		WO 1996-US1842	19960209
JP 10513363 W		WO 1996-US1842	19960209
US 6087157 A		WO 1996-US1842	19960209
EP 809691 B1		WO 1996-US1842	19960209
DE 69630206 E		WO 1996-US1842	19960209
US 6087157 A		US 1997-718350	19970325
EP 1449916 A2		EP 2003-21936	19960209
JP 2007105031 A		JP 2006-186890	20060706
JP 4054059 B2		JP 1996-524477	19960209
JP 4054352 B2 Div Ex		JP 1996-524477	19960209
JP 4054059 B2		WO 1996-US1842	19960209
JP 4054352 B2		JP 2006-186890	20060706

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 719160	B	Previous Publ	AU 9649210	A
DE 69630206	E	Based on	EP 809691	A
EP 1449916	A2	Div ex	EP 809691	A
US 5753267	A	Div ex	US 5695998	A
US 5866414	A	Cont of	US 5695998	A
US 6087157	A	CIP of	US 5695998	A
AU 9649210	A	Based on	WO 9624661	A
EP 809691	A1	Based on	WO 9624661	A
JP 10513363	W	Based on	WO 9624661	A
AU 719160	B	Based on	WO 9624661	A

US 6087157	A	Based on	WO 9624661	A
EP 809691	B1	Based on	WO 9624661	A
DE 69630206	E	Based on	WO 9624661	A
JP 4054352	B2	Previous Publ	JP 2007105031	A
JP 4054059	B2	Previous Publ	JP 10513363	W
JP 4054059	B2	Based on	WO 9624661	A

PRIORITY APPLN. INFO: US 1995-386452 19950210
US 1995-530001 19950919
US 1995-530002 19950919
US 1997-718350 19970325

AN 1996-384434 [199638] WPIX
CR 2000-271408
AB WO 1996024661 A1 UPAB: 20060111
Supporting the growth and differentiation of eukaryotic cells in vitro comprises contacting them with a cell growth substrate comprising submucosal tissue (SMT) of a warm-blooded vertebrate. Also new are: (1) a culture medium compsn. containing SMT, appropriate nutrients and opt. proliferating population of a preselected cell type; and (2) a device for studying in vitro invasive growth properties having an SMT interface between upper and lower chambers.
USE - Seeding of SMT with selected cells before implantation or injection improves functional properties when used as tissue graft material, e.g. for use as vascular grafts, skin replacement or auxiliary pancreas. SMT can also be used: (1) to grow islet cells in vitro, without concomitant growth of fibroblasts (also, not claimed, other cell types such as hepatocytes , chondrocytes or undifferentiated stem cells); and (2) for in vitro analysis of tumour growth under variable conditions or their invasiveness for extracellular matrices (e.g. for assessing potential therapeutic agents).
ADVANTAGE - SMT stimulates growth, attachment, differentiation and proliferation of many different cell types. It is relatively inexpensive and is a natural (not reconstituted) material from normal tissue.

Member(0004)
ABEQ US 5695998 A UPAB 20060111
Supporting the growth and differentiation of eukaryotic cells in vitro comprises contacting them with a cell growth substrate comprising submucosal tissue (SMT) of a warm-blooded vertebrate. Also new are: (1) a culture medium compsn. contg. SMT, appropriate nutrients and opt. proliferating population of a preselected cell type; and (2) a device for studying in vitro invasive growth properties having an SMT interface between upper and lower chambers.
USE - Seeding of SMT with selected cells before implantation or injection improves functional properties when used as tissue graft material, e.g. for use as vascular grafts, skin replacement or auxiliary pancreas. SMT can also be used: (1) to grow islet cells in vitro, without concomitant growth of fibroblasts (also, not claimed, other cell types such as hepatocytes , chondrocytes or undifferentiated stem cells); and (2) for in vitro analysis of tumour growth under variable conditions or their invasiveness for extracellular matrices (e.g. for assessing potential therapeutic agents).
ADVANTAGE - SMT stimulates growth, attachment, differentiation and proliferation of many different cell types. It is relatively inexpensive and is a natural (not reconstituted) material from normal tissue.

Member(0005)
ABEQ US 5753267 A UPAB 20060111
Supporting the growth and differentiation of eukaryotic cells in vitro comprises contacting them with a cell growth substrate comprising submucosal tissue (SMT) of a warm-blooded vertebrate. Also new are: (1) a culture medium compsn. contg. SMT, appropriate nutrients and opt. proliferating population of a preselected cell type; and (2) a device for studying in vitro invasive growth properties having an SMT interface between upper and lower chambers.
USE - Seeding of SMT with selected cells before implantation or injection improves functional properties when used as tissue graft material, e.g. for use as vascular grafts, skin replacement or auxiliary pancreas. SMT can also be used: (1) to grow islet cells in vitro, without concomitant growth of fibroblasts (also, not claimed, other cell types such as hepatocytes , chondrocytes or undifferentiated stem cells); and (2) for in vitro analysis of tumour growth under variable conditions or their invasiveness for extracellular matrices (e.g. for assessing potential therapeutic agents).
ADVANTAGE - SMT stimulates growth, attachment, differentiation and proliferation of many different cell types. It is relatively inexpensive and is a natural (not reconstituted) material from normal tissue.

Member(0007)
ABEQ US 5866414 A UPAB 20060111
Supporting the growth and differentiation of eukaryotic cells in vitro comprises contacting them with a cell growth substrate comprising submucosal tissue (SMT) of a warm-blooded vertebrate. Also new are: (1) a culture medium compsn. contg. SMT, appropriate nutrients and opt. proliferating population of a preselected cell type; and (2) a device for studying in vitro invasive growth properties having an SMT interface between upper and lower chambers.
USE - Seeding of SMT with selected cells before implantation or injection improves functional properties when used as tissue graft material, e.g. for use as vascular grafts, skin replacement or auxiliary pancreas. SMT can also be used: (1) to grow islet cells in vitro, without concomitant growth of fibroblasts (also, not claimed, other cell types such as hepatocytes , chondrocytes or undifferentiated stem cells); and (2) for in vitro analysis of tumour growth under variable conditions or their invasiveness for extracellular matrices (e.g. for assessing potential therapeutic agents).
ADVANTAGE - SMT stimulates growth, attachment, differentiation and proliferation of many different cell types. It is relatively inexpensive and is a natural (not reconstituted) material from normal tissue.

Member(0009)
ABEQ US 6087157 A UPAB 20060111
Supporting the growth and differentiation of eukaryotic cells in vitro comprises contacting them with a cell growth substrate comprising submucosal tissue (SMT) of a warm-blooded vertebrate. Also new are: (1) a culture medium compsn. contg. SMT, appropriate nutrients and opt. proliferating population of a preselected cell type; and (2) a device for studying in vitro invasive growth properties having an SMT interface between upper and lower

chambers.
USE - Seeding of SMT with selected cells before implantation or injection improves functional properties when used as tissue graft material, e.g. for use as vascular grafts, skin replacement or auxiliary pancreas. SMT can also be used: (1) to grow islet cells in vitro, without concomitant growth of fibroblasts (also, not claimed, other cell types such as hepatocytes, chondrocytes or undifferentiated stem cells); and (2) for in vitro analysis of tumour growth under variable conditions or their invasiveness for extracellular matrices (e.g. for assessing potential therapeutic agents).
ADVANTAGE - SMT stimulates growth, attachment, differentiation and proliferation of many different cell types. It is relatively inexpensive and is a natural (not reconstituted) material from normal tissue.

L12 ANSWER 164 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1996-209202 [199621] WPIX
CROSS REFERENCE: 1994-333178; 1995-200101; 1997-424242
DOC. NO. CPI: C1996-066701 [199621]
DOC. NO. NON-CPI: N1996-175131 [199621]
TITLE: Trans-epithelial device coated with 804G matrix protein - to induce hemidesmosome formation and thus improve adhesion of epithelial cells, also use of 804G proteins to preserve corneal explants
DERWENT CLASS: B04; D16; D22; P31; P34
INVENTOR: JONES J; JONES J C; JONES J C R; QUARANTA V; TAMURA R
PATENT ASSIGNEE: (DESM-N) DESMOS INC
COUNTRY COUNT: 20

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9610427	A2	19960411	(199621)*	EN	20[0]		<--
AU 9538883	A	19960426	(199631)	EN			<--
WO 9610427	A3	19960530	(199633)	EN			<--
US 5585267	A	19961217	(199705)	EN	11[0]		<--
EP 788382	A1	19970813	(199737)	EN	[0]		<--
AU 687272	B	19980219	(199824)	EN			<--
JP 10506810	W	19980707	(199837)	JA	32		<--
US 36844	E	20000829	(200043)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9610427 A2		WO 1995-US12675	19951002
US 5585267 A	CIP of	US 1993-42727	19930405
US 36844 E	CIP of	US 1993-42727	19930405
US 5585267 A	CIP of	US 1993-151134	19931112
US 36844 E	CIP of	US 1993-151134	19931112

US 5585267 A CIP of	US 1993-152460 19931112
US 36844 E CIP of	US 1993-152460 19931112
US 5585267 A	US 1994-317223 19941003
US 36844 E	US 1994-317223 19941003
AU 9538883 A	AU 1995-38883 19951002
AU 687272 B	AU 1995-38883 19951002
EP 788382 A1	EP 1995-938140 19951002
WO 9610427 A3	WO 1995-US12675 19951002
EP 788382 A1	WO 1995-US12675 19951002
JP 10506810 W	WO 1995-US12675 19951002
JP 10506810 W	JP 1996-512115 19951002
US 36844 E	US 1998-213632 19981217

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 687272 B	Previous Publ	AU 9538883 A
US 5585267 A	CIP of	US 5422264 A
US 36844 E	CIP of	US 5422264 A
US 5585267 A	CIP of	US 5510263 A
US 36844 E	CIP of	US 5510263 A
US 36844 E	Reissue of	US 5585267 A
AU 9538883 A	Based on	WO 9610427 A
EP 788382 A1	Based on	WO 9610427 A
AU 687272 B	Based on	WO 9610427 A
JP 10506810 W	Based on	WO 9610427 A

PRIORITY APPLN. INFO: US 1994-317223 19941003
US 1993-42727 19930405
US 1993-151134 19931112
US 1993-152460 19931112
US 1998-213632 19981217

AN 1996-209202 [199621] WPIX
CR 1994-333178; 1995-200101; 1997-424242
AB WO 1996010427 A2 UPAB: 20050512
Novel article comprises a trans-epithelial appliance, with a 804G hemidesmosome (HD) formation inducing matrix protein (I), deposited upon it. Also new is a method for preserving corneal explants ex vivo by culturing them in a medium containing (I), where (I) is the HD inducing soluble factor secreted by 804G rat bladder carcinoma cells.
USE - Coating with (I) induces epithelial cell attachment and spreading, especially when applied to an in-dwelling catheter, needle, metal pin or rod, colostomy tube, dental abutment piece or surgical mesh. Treated articles (coated with epithelial cells) reduce inflammation and/or infection at the site of entry into the body. They may also stimulate gum junction epithelial adhesion in the treatment of gingivitis and periodontitis, and water meshes are useful as skin grafts. (I) can also be used to maintain tissues ex vivo.
ADVANTAGE - Epithelial cells grow in an organised, tissue-like manner on (I)-treated surfaces, with improved attachment.

L12 ANSWER 165 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-344368 [199544] WPIX
DOC. NO. CPI: C1995-151329 [199544]
DOC. NO. NON-CPI: N1995-257371 [199544]
TITLE: Prepn of tissues for implantation - by elimination of native cells and extracellular components and re-population with allogeneic or

autologous cells
DERWENT CLASS: B04; D16; D22; P32; P34
INVENTOR: GOLDSTEIN S
PATENT ASSIGNEE: (CRYO-N) CRYOLIFE INC
COUNTRY COUNT: 61

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9524873	A1	19950921	(199544)*	EN	71[10]		<--
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AU 9519314	A	19951003	(199602)	EN			<--
							<--
US 5613982	A	19970325	(199718)	EN	27[10]		<--
							<--
US 5632778	A	19970527	(199727)	EN	27[10]		<--
							<--
JP 09510108	W	19971014	(199751)	JA	45[0]		<--
							<--
KR 97701523	A	19970412	(199817)	KO			<--
							<--
EP 871414	A1	19981021	(199846)	EN			<--
							<--
US 5843182	A	19981201	(199904)	EN			<--
							<--
US 5899936	A	19990504	(199925)	EN			<--
EP 871414	B1	20040428	(200429)	EN			
DE 69532976	E	20040603	(200436)	DE			
EP 1452153	A1	20040901	(200457)	EN			
ES 2219660	T3	20041201	(200480)	ES			
KR 365573	B	20040825	(200504)	KO			
CA 2185447	C	20090505	(200933)	EN			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9524873	A1	WO 1995-US2350	19950227
US 5613982	A Div Ex	US 1994-213754	19940314
US 5632778	A Div Ex	US 1994-213754	19940314
US 5843182	A Cont of	US 1994-213754	19940314
US 5899936	A Div Ex	US 1994-213754	19940314
AU 9519314	A	AU 1995-19314	19950227
DE 69532976	E	DE 1995-69532976	19950227
EP 871414	A1	EP 1995-911929	19950227
EP 871414	B1	EP 1995-911929	19950227
DE 69532976	E	EP 1995-911929	19950227
EP 1452153	A1 Div Ex	EP 1995-911929	19950227
ES 2219660	T3	EP 1995-911929	19950227
JP 09510108	W	JP 1995-524033	19950227
JP 09510108	W	WO 1995-US2350	19950227
KR 97701523	A	WO 1995-US2350	19950227
EP 871414	A1	WO 1995-US2350	19950227
EP 871414	B1	WO 1995-US2350	19950227
DE 69532976	E	WO 1995-US2350	19950227
KR 365573	B	WO 1995-US2350	19950227
US 5899936	A	US 1995-463171	19950605
US 5613982	A	US 1995-463455	19950605

US 5632778 A	US 1995-463643 19950605
KR 97701523 A	KR 1996-705072 19960913
KR 365573 B	KR 1996-705072 19960913
US 5843182 A	US 1997-791450 19970127
EP 1452153 A1	EP 2004-9948 19950227
CA 2185447 C	CA 1995-2185447 19950227
CA 2185447 C PCT Application	WO 1995-US2350 19950227

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 69532976	E	Based on	EP 871414	A
EP 1452153	A1	Div ex	EP 871414	A
ES 2219660	T3	Based on	EP 871414	A
KR 365573	B	Previous Publ	KR 97001523	A
AU 9519314	A	Based on	WO 9524873	A
JP 09510108	W	Based on	WO 9524873	A
KR 97701523	A	Based on	WO 9524873	A
EP 871414	A1	Based on	WO 9524873	A
EP 871414	B1	Based on	WO 9524873	A
DE 69532976	E	Based on	WO 9524873	A
KR 365573	B	Based on	WO 9524873	A
CA 2185447	C	Based on	WO 9524873	A

PRIORITY APPLN. INFO: US 1994-213754 19940314
US 1995-463171 19950605
US 1995-463455 19950605
US 1995-463643 19950605
US 1997-791450 19970127

AN 1995-344368 [199544] WPIX

AB WO 1995024873 A1 UPAB: 20060110
The following is claimed:(A) a process for generating implant tissue which comprises:(a) eliminating native cells and other extracellular tissue components from the tissue to provide a tissue matrix;(b) treating the tissue matrix with cellular adhesion factor (CAF) to promote subsequent attachment of cultured allogeneic or autologous cells to the surfaces of the tissue matrix, and(c) repopulating the tissue matrix with the cultured allogeneic or autologous cells. Also claimed are:(B) a process for treating xenogeneic tissue to improve its compatibility with the immune system of an implant recipient of a species different from the species of the source of the native tissue, comprising:(a) applying an amount of CAFs to a de- cellularised tissue matrix to promote the subsequent attachment of cultured cells to the tissue matrix, where the CAF comprises 1 or more extracellular proteins ordinarily associated with the native tissue in a liquid vehicle, and(b) repopulating the tissue matrix with autogenous or allogeneic cells to provide a non-immunogenic and bio-mechanically acceptable implant or graft which is vitalised by the cellular repopulation and is histologically and biochemically similar to the corresp. natural tissue;(C) a process for generating xenogenic implants or grafts from non-human collagenous, connective or vascular tissue, where the natural tissue is de-cellularised and washed to remove cellular and/or extracellular antigens, followed by treatment of the tissue matrix with adhesion factors (AFs) comprised of fibronectin and heparin to promote attachment of fibroblast cells immunologically acceptable to the implant or graft recipient, where the tissue matrix treated with AF is repopulated by incubating the matrix in the presence of the fibroblast cells and fibroblast growth factor (FGF) until such cellular repopulation provides a vitalised tissue histologically similar to the corresp. natural tissue, and where the implant tissue generated is mechanically, biochemically and immunologically

suitable for implantation;(D) a process for regenerating a non-immunogenic tissue matrix suitable for subsequent processing into implant tissue which comprises eliminating native cells by treating the tissue with components selected from enzymes and nucleases to inhibit subsequent native cell growth in the treated tissue and to limit generation of new immunological sites in the tissue;(E) a process for generating a xenogeneic heart valve from porcine or bovine valve tissue by:(a) de- cellularising the native valve tissue to provide a matrix free of native cellular antigens and treated to limit the generation of new immunological sites, and(b) applying attachment factors to the valve tissue matrix, comprised of 1 or more extracellular proteins ordinarily associated with the natural tissue, effective to promote attachment of fibroblast cells in the presence of fibroblast growth factor immunologically acceptable to the implant recipient to provide a vitalised valve tissue ;(F) a process for generating a graft or heart valve implant, suitable for use in a human, by treating a porcine heart with method (C), and(G) the implant tissue, tissue matrix and xenogeneic valve produced by the above methods. USE/ADVANTAGE - The methods are used to treat xenogeneic or allogeneic tissue to generate a viable bio-prosthesis which does not produce an adverse immune response by the recipient upon implant, while exhibiting only limited propensity to calcify and little stimulation of thromboembolism. They are used partic. for the preparation of heart valves for implantation (claimed).

Member(0008)
ABEQ US 5843182 A UPAB 20060110
The following is claimed:(A) a process for generating implant tissue which comprises:(a) eliminating native cells and other extracellular tissue components from the tissue to provide a tissue matrix;(b) treating the tissue matrix with cellular adhesion factor (CAF) to promote subsequent attachment of cultured allogeneic or autologous cells to the surfaces of the tissue matrix, and(c) repopulating the tissue matrix with the cultured allogeneic or autologous cells.
Also claimed are:(B) a process for treating xenogeneic tissue to improve its compatibility with the immune system of an implant recipient of a species different from the species of the source of the native tissue, comprising:(a) applying an amt. of CAFs to a de-cellularised tissue matrix to promote the subsequent attachment of cultured cells to the tissue matrix, where the CAF comprises 1 or more extracellular proteins ordinarily associated with the native tissue in a liq. vehicle, and(b) repopulating the tissue matrix with autogenous or allogeneic cells to provide a non-immunogenic and bio-mechanically acceptable implant or graft which is vitalised by the cellular repopulation and is histologically and biochemically similar to the corresp. natural tissue;(C) a process for generating xenogenic implants or grafts from non-human collagenous, connective or vascular tissue, where the natural tissue is de-cellularised and washed to remove cellular and/or extracellular antigens, followed by treatment of the tissue matrix with adhesion factors (AFs) comprised of fibronectin and heparin to promote attachment of fibroblast cells immunologically acceptable to the implant or graft recipient, where the tissue matrix treated with AF is repopulated by incubating the matrix in the presence of the fibroblast cells and fibroblast growth factor (FGF) until such cellular repopulation provides a vitalised tissue histologically similar to the corresp. natural tissue, and where the implant tissue

generated is mechanically, biochemically and immunologically suitable for implantation;(D) a process for regenerating a non-immunogenic tissue matrix suitable for subsequent processing into implant tissue which comprises eliminating native cells by treating the tissue with components selected from enzymes and nucleases to inhibit subsequent native cell growth in the treated tissue and to limit generation of new immunological sites in the tissue;(E) a process for generating a xenogeneic heart valve from porcine or bovine valve tissue by:(a) de-cellularising the native valve tissue to provide a matrix free of native cellular antigens and treated to limit the generation of new immunological sites, and(b) applying attachment factors to the valve tissue matrix, comprised of 1 or more extracellular proteins ordinarily associated with the natural tissue, effective to promote attachment of fibroblast cells in the presence of fibroblast growth factor immunologically acceptable to the implant recipient to provide a vitalised valve tissue ;(F) a process for generating a graft or heart valve implant, suitable for use in a human, by treating a porcine heart with method (C), and(G) the implant tissue, tissue matrix and xenogeneic valve produced by the above methods.

USE/ADVANTAGE - The methods are used to treat xenogeneic or allogeneic tissue to generate a viable bio-prosthesis which does not produce an adverse immune response by the recipient upon implant, while exhibiting only limited propensity to calcify and little stimulation of thromboembolism. They are used partic. for the prepn. of heart valves for implantation (claimed).

Member(0009)

ABEQ US 5899936 A UPAB 20060110

The following is claimed:(A) a process for generating implant tissue which comprises:(a) eliminating native cells and other extracellular tissue components from the tissue to provide a tissue matrix;(b) treating the tissue matrix with cellular adhesion factor (CAF) to promote subsequent attachment of cultured allogeneic or autologous cells to the surfaces of the tissue matrix, and(c) repopulating the tissue matrix with the cultured allogeneic or autologous cells.

Also claimed are:(B) a process for treating xenogeneic tissue to improve its compatibility with the immune system of an implant recipient of a species different from the species of the source of the native tissue, comprising:(a) applying an amt. of CAFs to a de-cellularised tissue matrix to promote the subsequent attachment of cultured cells to the tissue matrix, where the CAF comprises 1 or more extracellular proteins ordinarily associated with the native tissue in a liq. vehicle, and(b) repopulating the tissue matrix with autogenous or allogeneic cells to provide a non-immunogenic and bio-mechanically acceptable implant or graft which is vitalised by the cellular repopulation and is histologically and biochemically similar to the corresp. natural tissue;(C) a process for generating xenogenic implants or grafts from non-human collagenous, connective or vascular tissue, where the natural tissue is de-cellularised and washed to remove cellular and/or extracellular antigens, followed by treatment of the tissue matrix with adhesion factors (AFs) comprised of fibronectin and heparin to promote attachment of fibroblast cells immunologically acceptable to the implant or graft recipient,

where the tissue matrix treated with AF is repopulated by incubating the matrix in the presence of the fibroblast cells and fibroblast growth factor (FGF) until such cellular repopulation provides a vitalised tissue histologically similar to the corresp. natural tissue, and where the implant tissue generated is mechanically, biochemically and immunologically suitable for implantation;(D) a process for regenerating a non-immunogenic tissue matrix suitable for subsequent processing into implant tissue which comprises eliminating native cells by treating the tissue with components selected from enzymes and nucleases to inhibit subsequent native cell growth in the treated tissue and to limit generation of new immunological sites in the tissue;(E) a process for generating a xenogeneic heart valve from porcine or bovine valve tissue by:(a) de-cellularising the native valve tissue to provide a matrix free of native cellular antigens and treated to limit the generation of new immunological sites, and(b) applying attachment factors to the valve tissue matrix, comprised of 1 or more extracellular proteins ordinarily associated with the natural tissue, effective to promote attachment of fibroblast cells in the presence of fibroblast growth factor immunologically acceptable to the implant recipient to provide a vitalised valve tissue ;(F) a process for generating a graft or heart valve implant, suitable for use in a human, by treating a porcine heart with method (C), and(G) the implant tissue, tissue matrix and xenogeneic valve produced by the above methods.

USE/ADVANTAGE - The methods are used to treat xenogeneic or allogeneic tissue to generate a viable bio-prosthesis which does not produce an adverse immune response by the recipient upon implant, while exhibiting only limited propensity to calcify and little stimulation of thromboembolism. They are used partic. for the prepn. of heart valves for implantation (claimed).

L12 ANSWER 166 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-321774 [199542] WPIX
DOC. NO. CPI: C1995-142936 [199542]
DOC. NO. NON-CPI: N1995-242181 [199542]
TITLE: Implantable articles with as-cast macrotextured surface regions - provided by forming a casting mould with complementary mactrotexture surface features which promote hard tissue ingrowth and improved fixation.
DERWENT CLASS: A81; D22; L02; M22; P32; P63
INVENTOR: CALDARISE S; FLYNN T M; LASALLE D L; MANGINELLI R P
PATENT ASSIGNEE: (CALD-I) CALDARISE S; (JOHJ-C) JOHNSON & JOHNSON PROFESSIONAL; (JOHJ-C) DEPUY ORTHOPAEDICS INC
COUNTRY COUNT: 18

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 672395	A1	19950920	(199542)*	EN	16[8]		<--
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CA 2142636	A	19950819	(199545)	EN			<--
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JP 07299085	A	19951114	(199603)	JA	1		<--
							<--

US 5658334	A	19970819	(199739)	EN	14[8] <--
					<--
US 5687788	A	19971118	(199801)	EN	14[8] <--
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US 5897592	A	19990427	(199924)	EN	<--
					<--
EP 672395	B1	20010822	(200149)	EN	<--
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DE 69522247	E	20010927	(200164)	DE	<--
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ES 2159605	T3	20011016	(200173)	ES	<--
CA 2142636	C	20050920	(200566)	EN	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 672395 A1		EP 1995-301015	19950217
US 5658334 A	Cont of	US 1994-198874	19940218
US 5687788 A	Div Ex	US 1994-198874	19940218
US 5897592 A	Cont of	US 1994-198874	19940218
CA 2142636 A		CA 1995-2142636	19950216
CA 2142636 C		CA 1995-2142636	19950216
DE 69522247 E		DE 1995-69522247	19950217
EP 672395 B1		EP 1995-301015	19950217
DE 69522247 E		EP 1995-301015	19950217
ES 2159605 T3		EP 1995-301015	19950217
JP 07299085 A		JP 1995-52038	19950217
US 5687788 A		US 1995-457227	19950601
US 5658334 A		US 1996-662170	19960724
US 5897592 A	Cont of	US 1996-662170	19960724
US 5897592 A		US 1997-841199	19970429

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69522247 E	Based on	EP 672395 A
ES 2159605 T3	Based on	EP 672395 A
US 5897592 A	Cont of	US 5658334 A

PRIORITY APPLN. INFO: US 1994-198874 19940218
US 1995-457227 19950601
US 1996-662170 19960724
US 1997-841199 19970429

AN 1995-321774 [199542] WPIX

AB EP 672395 A1 UPAB: 20060110

A bond prosthesis comprises an implantable article having an outer bond engaging surface, at least part of which has an integral, as-cast macrotextured surface with some macropores having undercut edge profiles. Also claimed is a method of making a bond prosthesis which comprising: (a) depositing a layer of powder material in a confined region; (b) applying a binder material to the powder material in selected regions to solidify it; (c) repeating steps (a) and (b) a predetermined number of times to deposit successive layers of powder, giving regional variation. Binder material is applied so that a solidified portion of each layer is bonded to the preceding layer, forming a casting mould that defines a negative of the bone prosthesis. At least part of the casting mould has a textured surface including macropores with undercut edge profiles corresponding to the variations in the regions;

(d) removing loose powder material from the casting mould; (e) casting a material in contact with the mould and hardening the material to form a bone prosthesis; and (f) removing the bone prosthesis from the casting mould whereby it has an as-cast macrotextured surface having macropores with undercut edge profiles on at least part of its exterior.
Also claimed is the casting of molten material by: (a)' adhering one or more casting moulds to a central runner system to form a cluster such that each casting mould communicates with an interior portion of the runner system; (b)' applying one or more coats of a refractory binder material to the cluster while allowing the binder material to dry between successive applications, to make a binder encased cluster; (c)' firing the binder encased cluster; and (d)' casting a molten metal in the fired binder encased cluster.
Also claimed is a method of making a bone prosthesis comprising: (a)'' applying a three-dimensional printing process to form a green casting mould by successive applications of a binder material to a ceramic forming powder to bond some of the powder together into a solid forming the green casting mould. At least some of the mould has a macroporous textured surface having macropores with undercut edge profiles; (b)'' removing non-bonded powder material from the green casting mould' (c)'' firing (b)'' to give a ceramic casting mould; (d)'' casting a molten metal against (c)''and allowing the molten metal to harden in contact with it to form the bone prosthesis. At least part of the bone prosthesis has an as-cast macrotextured surface having macropores with undercut edge profiles; and (e)'' separating the bone prosthesis from the casting mould.
USE - Used as implantable articles e.g. for bone prosthesis.
ADVANTAGE - The pore size, porosity and pore shape may be varied across the surface, or varied with depth, to independently enhance different mechanical and physiological factors at the one-prosthesis interface. The surface characteristics promote hard tissue ingrowth and improved fixation within the body.

Member(0005)
ABEQ US 5687788 A UPAB 20060110
A bond prosthesis comprises an implantable article having an outer bond engaging surface, at least part of which has an integral, as-cast macrotextured surface with some macropores having undercut edge profiles.
Also claimed is a method of making a bond prosthesis which comprising: (a) depositing a layer of powder material in a confined region; (b) applying a binder material to the powder material in selected regions to solidify it; (c) repeating steps (a) and (b) a predetermined number of times to deposit successive layers of powder, giving regional variation. Binder material is applied so that a solidified portion of each layer is bonded to the preceding layer, forming a casting mould that defines a negative of the bone prosthesis. At least part of the casting mould has a textured surface including macropores with undercut edge profiles corresponding to the variations in the regions; (d) removing loose powder material from the casting mould; (e) casting a material in contact with the mould and hardening the material to form a bone prosthesis; and (f) removing the bone prosthesis from the casting mould whereby it has an as-cast macrotextured surface having macropores with undercut edge profiles on at least part of its exterior.
Also claimed is the casting of molten material by: (a)' adhering one or more casting moulds to a central runner system to form a cluster such that each casting mould communicates with an interior portion of the runner system; (b)' applying one or more coats of a refractory binder material to the cluster while allowing the binder material to dry between successive applications, to make a binder encased cluster; (c)' firing the

binder encased cluster; and (d)' casting a molten metal in the fired binder encased cluster.
Also claimed is a method of making a bone prosthesis comprising: (a)'' applying a three-dimensional printing process to form a green casting mould by successive applications of a binder material to a ceramic forming powder to bond some of the powder together into a solid forming the green casting mould. At least some of the mould has a macroporous textured surface having macropores with undercut edge profiles; (b)'' removing non-bonded powder material from the green casting mould' (c)'' firing (b)'' to give a ceramic casting mould; (d)'' casting a molten metal against (c)''and allowing the molten metal to harden in contact with it to form the bone prosthesis. At least part of the bone prosthesis has an as-cast macrotextured surface having macropores with undercut edge profiles; and (e)'' separating the bone prosthesis from the casting mould.
USE - Used as implantable articles e.g. for bone prosthesis.
ADVANTAGE - The pore size, porosity and pore shape may be varied across the surface, or varied with depth, to independently enhance different mechanical and physiological factors at the one-prosthesis interface. The surface characteristics promote hard tissue ingrowth and improved fixation within the body.

Member(0006)
ABEQ US 5897592 A UPAB 20060110
A bond prosthesis comprises an implantable article having an outer bond engaging surface, at least part of which has an integral, as-cast macrotextured surface with some macropores having undercut edge profiles.
Also claimed is a method of making a bond prosthesis which comprising: (a) depositing a layer of powder material in a confined region; (b) applying a binder material to the powder material in selected regions to solidify it; (c) repeating steps (a) and (b) a predetermined number of times to deposit successive layers of powder, giving regional variation. Binder material is applied so that a solidified portion of each layer is bonded to the preceding layer, forming a casting mould that defines a negative of the bone prosthesis. At least part of the casting mould has a textured surface including macropores with undercut edge profiles corresponding to the variations in the regions; (d) removing loose powder material from the casting mould; (e) casting a material in contact with the mould and hardening the material to form a bone prosthesis; and (f) removing the bone prosthesis from the casting mould whereby it has an as-cast macrotextured surface having macropores with undercut edge profiles on at least part of its exterior.
Also claimed is the casting of molten material by: (a)' adhering one or more casting moulds to a central runner system to form a cluster such that each casting mould communicates with an interior portion of the runner system; (b)' applying one or more coats of a refractory binder material to the cluster while allowing the binder material to dry between successive applications, to make a binder encased cluster; (c)' firing the binder encased cluster; and (d)' casting a molten metal in the fired binder encased cluster.
Also claimed is a method of making a bone prosthesis comprising: (a)'' applying a three-dimensional printing process to form a green casting mould by successive applications of a binder material to a ceramic forming powder to bond some of the powder together into a solid forming the green casting mould. At least some of the mould has a macroporous textured surface having macropores with undercut edge profiles; (b)'' removing non-bonded powder material from the green casting mould' (c)''

firing (b)'' to give a ceramic casting mould; (d)'' casting a molten metal against (c)''and allowing the molten metal to harden in contact with it to form the bone prosthesis. At least part of the bone prosthesis has an as-cast macrotextured surface having macropores with undercut edge profiles; and (e)'' separating the bone prosthesis from the casting mould.

USE - Used as implantable articles e.g. for bone prosthesis.

ADVANTAGE - The pore size, porosity and pore shape may be varied across the surface, or varied with depth, to independently enhance different mechanical and physiological factors at the one-prosthesis interface. The surface characteristics promote hard tissue ingrowth and improved fixation within the body.

L12 ANSWER 167 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-269281 [199535] WPIX
CROSS REFERENCE: 1998-331944
TITLE: Biocompatible implant having improved host tissue compatibility, and ingrowth capability - comprises tissue-contacting surfaces of electrically charged material or surfaces modified with covalently bonded activator molecule
DERWENT CLASS: A96; B07; D22; P34
INVENTOR: VALENTINI R F
PATENT ASSIGNEE: (UYBW-C) UNIV BROWN RES FOUND
COUNTRY COUNT: 20

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9519796	A1	19950727	(199535)*	EN	30[8]		<--
AU 9516845	A	19950808	(199545)	EN			<--
EP 741585	A1	19961113	(199650)	EN	[1]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9519796 A1		WO 1995-US770	19950120
AU 9516845 A		AU 1995-16845	19950120
EP 741585 A1		EP 1995-908589	19950120
EP 741585 A1		WO 1995-US770	19950120

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9516845 A		Based on	WO 9519796 A
EP 741585 A1		Based on	WO 9519796 A

PRIORITY APPLN. INFO: US 1994-184292 19940121
AN 1995-269281 [199535] WPIX
CR 1998-331944
AB WO 1995019796 A1 UPAB: 20050702
A biocompatible implant has improved host tissue compatibility and ingrowth capability and comprises tissue contacting surface(s) of an electrically

charged material or surface(s) modified with covalently bonded activator molecules to promote host tissue ingrowth to the implant. Also claimed is a method of making the implant. The activator molecules are selected from amine gps. hydroxyl gps., carboxyl gps., sulphhydryl gps., oligopeptides, cell attachment factors, biological growth factors, morphogenic factors, adhesion molecules, antibodies and proteins. The electrically charged material is an electret material, especially a polymeric electret material, more especially fluorinated ethylene propylene copolymer or a piezoelectric material, especially polyvinylidene fluoride or polyvinylidene fluoride-trifluoroethylene copolymer. The electrically charged material has a net positive charge or net negative charge and comprises a dense polymeric coating or porous polymeric coating.
The implant further comprises a core structural portion and an electrically charged coating, or the implant is entirely constructed of an electrically charged material.
USE - The implants are useful as orthopaedic and other medical implants.
ADVANTAGE - The surface coating promotes an improved host- implant bond, thus improving the durability and lifetime of the prosthesis and enhancing patient mobility and comfort. - The materials can also be used for soft tissue implants e.g. breast prostheses, percutaneous implants, vascular implants, dental implants, etc., cosmetic or reconstructive surgery etc.

L12 ANSWER 168 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-170021 [199522] WPIX
CROSS REFERENCE: 1997-051778; 1998-467268; 2001-040290
DOC. NO. CPI: C1995-079009 [199522]
TITLE: Complex drug delivery systems and cell regeneration templates - provided by computer aided design of solid free-form fabrication processes to form sequential polymeric layers
DERWENT CLASS: A96; B07; P32; P34; P73
INVENTOR: CIMA L G; CIMA M J
PATENT ASSIGNEE: (MASI-C) MASSACHUSETTS INST TECHNOLOGY
COUNTRY COUNT: 19

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9511007	A1	19950427	(199522)*	EN	48[2]		<--
US 5490962	A	19960213	(199612)	EN	11[2]		<--
US 5518680	A	19960521	(199626)	EN	8[0]		<--
EP 724428	A1	19960807	(199636)	EN	[1]		<--
JP 09502999	W	19970325	(199722)	JA	43[1]		<--
US 5869170	A	19990209	(199913)	EN			<--
JP 2930420	B2	19990803	(199936)	JA	16		<--
EP 724428	B1	20001220	(200105)	EN			<--
DE 69426457	E	20010125	(200112)	DE			<--
ES 2154302	T3	20010401	(200123)	ES			<--

CA 2173318 C 20020101 (200212) EN <--
<--
US 6530958 B1 20030311 (200321) EN <--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9511007 A1		WO 1994-US11893	19941018
US 5490962 A		US 1993-138345	19931018
US 5518680 A	CIP of	US 1993-138345	19931018
US 5869170 A	Div Ex	US 1993-138345	19931018
US 6530958 B1	CIP of	US 1993-138345	19931018
US 5518680 A		US 1994-200636	19940223
US 6530958 B1	Div Ex	US 1994-200636	19940223
CA 2173318 C		CA 1994-2173318	19941018
DE 69426457 E		DE 1994-69426457	19941018
EP 724428 A1		EP 1994-930822	19941018
EP 724428 B1		EP 1994-930822	19941018
DE 69426457 E		EP 1994-930822	19941018
ES 2154302 T3		EP 1994-930822	19941018
EP 724428 A1		WO 1994-US11893	19941018
JP 09502999 W		WO 1994-US11893	19941018
JP 2930420 B2		WO 1994-US11893	19941018
EP 724428 B1		WO 1994-US11893	19941018
DE 69426457 E		WO 1994-US11893	19941018
CA 2173318 C		WO 1994-US11893	19941018
JP 09502999 W		JP 1995-512176	19941018
JP 2930420 B2		JP 1995-512176	19941018
US 6530958 B1		US 1995-463203	19950605
US 5869170 A		US 1995-464593	19950605

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69426457 E	Based on	EP 724428 A
ES 2154302 T3	Based on	EP 724428 A
JP 2930420 B2	Previous Publ	JP 09502999 W
US 5869170 A	Div ex	US 5490962 A
US 6530958 B1	CIP of	US 5490962 A
US 6530958 B1	Div ex	US 5510680 A
EP 724428 A1	Based on	WO 9511007 A
JP 09502999 W	Based on	WO 9511007 A
JP 2930420 B2	Based on	WO 9511007 A
EP 724428 B1	Based on	WO 9511007 A
DE 69426457 E	Based on	WO 9511007 A
CA 2173318 C	Based on	WO 9511007 A

PRIORITY APPLN. INFO: US 1994-200636 19940223
US 1993-138345 19931018
US 1995-463203 19950605
US 1995-464593 19950605

AN 1995-170021 [199522] WPIX
CR 1997-051778; 1998-467268; 2001-040290
AB WO 1995011007 A1 UPAB: 20060109
Use of a solid free-form fabrication (SFF) method to form sequential layers of polymeric materials for the production of medical devices (I) is new.

(I) having porous spaces within the polymer to allow cell attachment and growth within them for e.g., bone regeneration or repair is produced by three dimensional printing involving: (a) spreading a first dispersion of biocompatible polymer or composite powder onto a bed; (b) printing a second dispersion (or powder) in a solvent which causes binding of the two layers at points where walls are required; and (c) repeating step (b) until the matrix is complete. The powder is pref. resorbable e.g. calcium phosphate, hydroxyapatite or calcium carbonate having a particle size of <40μm. (I) here contains walls which are <100μm thick.

USE - (I) provide drug delivery systems for the controlled release of drugs in a complex temporal pattern and may be tailored to the specific needs of the patient by use of computer-aided design (CAD) techniques during manufacture. Varying drug release profiles may be obtained using bioerodible structures incorporating the active material either throughout the matrix or in 'pockets'. (I) may be constructed as templates for the growth of new tissue, e.g. bone, liver tissue, for regeneration or repair where the internal structure of (I) may be varied to suit the type of tissue. (I) may also have externally manufactured devices incorporated into the structure.

ADVANTAGE - (I) enable complex therapeutic regimes to be carried out by oral dosing or by implantation overcoming difficulties with patient compliance and the requirement for additional hospital visits. SFF methods enable (I) to have intricate reproducible structures on the micron scale.

Member(0006)

ABEQ US 5869170 A UPAB 20060109

Use of a solid free-form fabrication (SFF) method to form sequential layers of polymeric materials for the production of medical devices (I) is new.

(I) having porous spaces within the polymer to allow cell attachment and growth within them for e.g., bone regeneration or repair is produced by three dimensional printing involving: (a) spreading a first dispersion of biocompatible polymer or composite powder onto a bed; (b) printing a second dispersion (or powder) in a solvent which causes binding of the two layers at points where walls are required; and (c) repeating step (b) until the matrix is complete. The powder is pref. resorbable e.g. calcium phosphate, hydroxyapatite or calcium carbonate having a particle size of <40μm. (I) here contains walls which are <100μm thick.

USE - (I) provide drug delivery systems for the controlled release of drugs in a complex temporal pattern and may be tailored to the specific needs of the patient by use of computer-aided design (CAD) techniques during manufacture. Varying drug release profiles may be obtained using bioerodible structures incorporating the active material either throughout the matrix or in 'pockets'. (I) may be constructed as templates for the growth of new tissue, e.g. bone, liver tissue, for regeneration or repair where the internal structure of (I) may be varied to suit the type of tissue. (I) may also have externally manufactured devices incorporated into the structure.

ADVANTAGE - (I) enable complex therapeutic regimes to be carried out by oral dosing or by implantation overcoming difficulties with patient compliance and the requirement for additional hospital visits. SFF methods enable (I) to have intricate reproducible structures on the micron scale.

L12 ANSWER 169 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-156563 [199521] WPIX
CROSS REFERENCE: 1991-101780; 1993-145166; 2002-076868

DOC. NO. CPI: C1995-072089 [199521]
DOC. NO. NON-CPI: N1995-123334 [199521]
TITLE: New biodegradable implant precursor - useful in treatment of tissue defects in animals.
DERWENT CLASS: A96; B07; C07; D21; D22; P32; P34
INVENTOR: COX C P; DUNN R L; LOWE B K; NORTON R L; PETERSON K S; POLSON A M; SWANBOM D D
PATENT ASSIGNEE: (ATRI-N) ATRIX LAB INC
COUNTRY COUNT: 22

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 649662	A1	19950426	(199521)*	EN	22[4]		<--
AU 9466142	A	19950413	(199524)	EN			<--
CA 2117394	A	19950329	(199526)	EN			<--
JP 07163654	A	19950627	(199534)	JA	19[4]		<--
US 5487897	A	19960130	(199611)	EN	17[4]		<--
US 5660849	A	19970826	(199740)	EN	14[4]		<--
US 6071530	A	20000606	(200033)#	EN			<--
KR 248326	B1	20000601	(200130)	KO			<--
KR 263443	B1	20000801	(200132)#	KO			<--
EP 649662	B1	20020206	(200211)	EN			<--
DE 69429801	E	20020321	(200227)	DE			<--
US 6395293	B2	20020528	(200243)	EN			<--
ES 2173102	T3	20021016	(200279)	ES			<--
JP 2003093498	A	20030402	(200331)	JA	19		<--
JP 3451259	B2	20030929	(200365)	JA	18		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 649662 A1		EP 1994-113193	19940824
US 5487897 A	CIP of	US 1989-384416	19890724
US 5660849 A	CIP of	US 1989-384416	19890724
US 6395293 B2	CIP of	US 1989-384416	19890724
US 6071530 A	CIP of	US 1989-384416	19890724
US 5487897 A	CIP of	US 1991-783512	19911028
US 5660849 A	CIP of	US 1991-783512	19911028
US 6395293 B2	CIP of	US 1991-783512	19911028
US 6071530 A	CIP of	US 1991-783512	19911028
US 5487897 A		US 1993-127642	19930928
US 5660849 A	Div Ex	US 1993-127642	19930928
US 6395293 B2	Cont of	US 1993-127642	19930928

AU 9466142 A	AU 1994-66142 19940705
CA 2117394 A	CA 1994-2117394 19940707
JP 07163654 A	JP 1994-196132 19940728
JP 2003093498 A Div Ex	JP 1994-196132 19940728
JP 3451259 B2	JP 1994-196132 19940728
KR 248326 B1	KR 1994-19893 19940810
KR 263443 B1 Div Ex	KR 1994-19893 19940810
US 5660849 A	US 1994-294754 19940823
US 6395293 B2 Cont of	US 1994-294754 19940823
US 6071530 A Cont of	US 1994-294754 19940823
DE 69429801 E	DE 1994-69429801 19940824
EP 649662 B1	EP 1994-113193 19940824
DE 69429801 E	EP 1994-113193 19940824
ES 2173102 T3	EP 1994-113193 19940824
US 6395293 B2 Cont of	US 1997-883260 19970626
US 6071530 A	US 1997-883260 19970626
KR 263443 B1	KR 1999-49028 19991029
US 6395293 B2	US 2000-520735 20000308
EP 649662 B1 Related to	EP 2001-117430 19940824
JP 2003093498 A	JP 2002-269863 19940728

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 649662 B1	Related to	EP 1147781 A
DE 69429801 E	Based on	EP 649662 A
ES 2173102 T3	Based on	EP 649662 A
JP 3451259 B2	Previous Publ	JP 07163654 A
US 5487897 A	CIP of	US 5077049 A
US 5660849 A	CIP of	US 5077049 A
US 6395293 B2	CIP of	US 5077049 A
US 6071530 A	CIP of	US 5077049 A
US 5487897 A	CIP of	US 5324519 A
US 5660849 A	CIP of	US 5324519 A
US 6395293 B2	CIP of	US 5324519 A
US 6071530 A	CIP of	US 5324519 A
US 5660849 A	Div ex	US 5487897 A
US 6395293 B2	Cont of	US 5487897 A
US 6395293 B2	Cont of	US 5660849 A
US 6071530 A	Cont of	US 5660849 A
US 6395293 B2	Cont of	US 6071530 A

PRIORITY APPLN. INFO: US 1993-127642 19930928
US 1989-384416 19890724
US 1991-783512 19911028
US 1994-294754 19940823
US 1997-883260 19970626
KR 1999-49028 19991029
US 2000-520735 20000308

AN 1995-156563 [199521] WPIX

CR 1991-101780; 1993-145166; 2002-076868

AB EP 649662 A1 UPAB: 20060109

A new implant precursor for implantation in a tissue defect in an animal comprises: a two-part structure composed of an outer sac and a liquid content; the implant precursor comprising a mixture of a biocompatible, biodegradable, water-coagulable thermoplastic polymer and a pharmaceutically-acceptable, water-soluble organic solvent.

Also claimed is a method of making an implant precursor, comprising: (a) applying an effective amount of an aqueous medium to a surface of a solid support substrate to form an aqueous layer; (b) dispensing an effective amount of a liquid polymer solution onto the aqueous layer; the polymer solution comprising a water-coagulable, biocompatible, biodegradable thermoplastic polymer and a water-miscible, pharmaceutically-acceptable organic solvent; (c) applying an effective amount of an aqueous medium onto the surface of the polymer solution; and (d) allowing the polymer adjacent to the aqueous medium to coagulate to form the implant precursor comprising a two-part structure composed of an outer sac and a liquid content, the amount of aqueous medium applied in steps (a) and (c) being effective to cause surface coagulation of the polymer to form the outer sac of the implant precursor. Also claimed is an apparatus for forming an implant precursor and a kit comprising the latter.
USE - The implant precursor is useful for treating tissue defects in animals, e.g. for enhancing cell growth and tissue regeneration, wound and organ repair, nerve regeneration, soft and hard tissue regeneration and for delivery of biologically active substances to tissue or organs. Precursor is especially useful in periodontal restoration.
ADVANTAGE - As the implant precursor does not flow like a liquid, it provides easy manipulation and placement of a liq . polymer system for forming an implant on a select area of a tissue defect without the uncontrolled flow of the polymer solution outside the area of the implant site. The present implant precursor provides a system for forming an implant with a desired thickness, size and shape. Unlike a solid implant, the implant precursor is easy to manipulate and may be shaped and moulded within the defect site as it solidifies. Advantageously, the mouldability of the implant precursor allows it to conform to irregularities, cracks, holes and the like, in the tissue defect site. In addition, the surface of the implant precursor is tacky to the touch and tends to remain in place where it is applied to a tissue defect.

Member(0007)
ABEQ US 6071530 A UPAB 20060109
A new implant precursor for implantation in a tissue defect in an animal comprises: a two-part structure composed of an outer sac and a liq. content; the implant precursor comprising a mixt. of a biocompatible, biodegradable, water-coagulable thermoplastic polymer and a pharmaceutically-acceptable, water-soluble organic solvent.
Also claimed is a method of making an implant precursor, comprising: (a) applying an effective amt. of an aq. medium to a surface of a solid support substrate to form an aq. layer; (b) dispensing an effective amt. of a liq. polymer soln. onto the aq. layer; the polymer soln. comprising a water-coagulable, biocompatible, biodegradable thermoplastic polymer and a water-miscible, pharmaceutically-acceptable organic solvent; (c) applying an effective amt. of an aq. medium onto the surface of the polymer soln.; and (d) allowing the polymer adjacent to the aq. medium to coagulate to form the implant precursor comprising a two-part structure composed of an outer sac and a liq. content, the amt. of aq. medium applied in steps (a) and (c) being effective to cause surface coagulation of the polymer to form the outer sac of the implant precursor.
Also claimed is an apparatus for forming an implant precursor and a kit comprising the latter.
USE - The implant precursor is useful for treating tissue defects in animals, e.g. for enhancing cell growth and tissue regeneration, wound and organ repair, nerve regeneration, soft and hard tissue regeneration and for delivery of biologically active substances to

tissue or organs. Precursor is esp. useful in periodontal restoration.

ADVANTAGE - As the implant precursor does not flow like a liq., it provides easy manipulation and placement of a liq. polymer system for forming an implant on a select area of a tissue defect without the uncontrolled flow of the polymer soln. outside the area of the implant site. The present implant precursor provides a system for forming an implant with a desired thickness, size and shape. Unlike a solid implant, the implant precursor is easy to manipulate and may be shaped and moulded within the defect site as it solidifies. Advantageously, the mouldability of the implant precursor allows it to conform to irregularities, cracks, holes and the like, in the tissue defect site. In addn., the surface of the implant precursor is tacky to the touch and tends to remain in place where it is applied to a tissue defect.

L12 ANSWER 170 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-074977 [199510] WPIX
DOC. NO. CPI: C1995-033315 [199510]
DOC. NO. NON-CPI: N1995-059443 [199510]
TITLE: New biodegradable prosthetic template - for repair and replacement of diseases or injured bone.
DERWENT CLASS: A96; B04; D22; P32
INVENTOR: MIKOS A G
PATENT ASSIGNEE: (RICV-C) UNIV RICE
COUNTRY COUNT: 54

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9503011	A1	19950202	(199510)*	EN	27[0]		<--
AU 9474028	A	19950220	(199521)	EN			<--
US 5522895	A	19960604	(199628)	EN	5[0]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9503011 A1		WO 1994-US8265	19940722
US 5522895 A		US 1993-96780	19930723
AU 9474028 A		AU 1994-74028	19940722

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9474028 A	Based on	WO 9503011 A

PRIORITY APPLN. INFO: US 1993-96780 19930723
AN 1995-074977 [199510] WPIX
AB WO 1995003011 A1 UPAB: 20060109
Biodegradable prosthetic template/BPT comprises (a) a biodegradable polymer matrix (BPM) with pores and a three dimensional shape and a mechanical strength sufficient for use in load-bearing bone; or (b) a BPM, and a pore-creating substance (PCS) dispersed within the BPM, having a three dimensional

shape and mechanical strength suitable for replacement of load bearing bone. Also claimed is the mfr of a composite biodegradable polymeric prosthesis (BPP) comprising: (i) mixing a PCS selected from particulates, fibres an webs; with a soln of biodegradable polymer in a solvent; and (ii) removing the solvent to form a composite of a polymeric matrix embedded with PCS.
USE - The template is a biodegradable, bioresorbable, three dimensional template for repair and replacement of diseases or injured bone and provides mechanical strength to the bone while also providing a guide for growth of bone tissue into the template.
ADVANTAGE - The template can be implanted without first being rendered to its porous state, porosity can be achieved after implantation by a faster rate of biodegradation of a pore forming component relative to a slower rate of degradation of the matrix. Alternatively the implant may be wholly or partially porous prior to implantation. The implant has sufficient compressive strength and modulus in any form to serve as a bone prosthesis while the body regenerates new natural bone. The implant is ultimately replaced by natural bone and biodegrades so that it is displaced or eliminated from the body by natural processes. The rate of degradation/resorption is matched to the rate of regeneration of natural bone.

L12 ANSWER 171 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-022448 [199503] WPIX
DOC. NO. CPI: C1995-010348 [199503]
TITLE: New oligomer conjugates - useful for, e.g., treatment of bacterial infections
DERWENT CLASS: B04; D16
INVENTOR: DILEANIS J L; DIVER J M; KLEM R E; RILEY T A; VAGHEFI M M
PATENT ASSIGNEE: (GENT-N) GENTA INC
COUNTRY COUNT: 21

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9427615	A1	19941208	(199503)*	EN	92[0]		<--
							<--
AU 9470197	A	19941220	(199512)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9427615 A1		WO 1994-US5568	19940518
AU 9470197 A		AU 1994-70197	19940518
AU 9470197 A		WO 1994-US5568	19940518

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9470197 A	Based on		WO 9427615 A

PRIORITY APPLN. INFO: US 1993-68140 19930526
AN 1995-022448 [199503] WPIX
AB WO 1994027615 A1 UPAB: 20050510
Oligomer conjugate comprises: (a) an oligomer with a length of 5-50 nucleoside base units; (b) an oligomer uptake enchancer molecule; and (c) a spacer attached to the oligomer and to the enhancer molecule.

USE - The oligomer conjugates may be used to inhibit growth of bacteria or to kill bacteria present in an organism. They may thus be used to inhibit bacterial growth in tissue cultures, fermentation processes, the environment, organisms (e.g. humans) or on the surface of implantable medical device. ADVANTAGE - The conjugates show enhanced uptake into bacterial cells.

L12 ANSWER 172 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1995-006371 [199501] WPIX
CROSS REFERENCE: 1998-582600; 1999-189526; 2004-639589
TITLE: New bioactive conjugate adapted to coat metal implant outer surface - promotes tissue growth, stabilisation and integration of the implant.
DERWENT CLASS: B07; D22; M11; P32; P34
INVENTOR: MCKEE M D; NANCI A; SACHER E; SAVADOGO O; WUEST J
PATENT ASSIGNEE: (UMTL-C) UNIV MONTREAL
COUNTRY COUNT: 25

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9426321	A1	19941124	(199501)*	EN	43[14]		<--
AU 9466434	A	19941212	(199522)	EN			<--
EP 697896	A1	19960228	(199613)	EN	[1]		<--
BR 9406647	A	19960312	(199616)	PT			<--
JP 08511696	W	19961210	(199710)	JA	42		<--
BR 1100608	A3	19980428	(199823)	PT			<--
AU 690113	B	19980423	(199828)	EN			<--
EP 697896	B1	19990113	(199907)	EN			<--
DE 69415974	E	19990225	(199914)	DE			<--
ES 2131684	T3	19990801	(199937)	ES			<--
KR 302545	B	20011122	(200244)	KO			<--
JP 2004154586	A	20040603	(200436)	JA	18		
JP 3548175	B2	20040728	(200449)	JA	17		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9426321 A1		WO 1994-CA257	19940509
AU 9466434 A		AU 1994-66434	19940509
AU 690113 B		AU 1994-66434	19940509
BR 9406647 A		BR 1994-6647	19940509
DE 69415974 E		DE 1994-69415974	19940509
EP 697896 A1		EP 1994-915005	19940509
EP 697896 B1		EP 1994-915005	19940509
DE 69415974 E		EP 1994-915005	19940509

ES 2131684 T3	EP 1994-915005 19940509
JP 08511696 W	JP 1994-524763 19940509
JP 2004154586 A Div Ex	JP 1994-524763 19940509
JP 3548175 B2	JP 1994-524763 19940509
EP 697896 A1	WO 1994-CA257 19940509
BR 9406647 A	WO 1994-CA257 19940509
JP 08511696 W	WO 1994-CA257 19940509
EP 697896 B1	WO 1994-CA257 19940509
DE 69415974 E	WO 1994-CA257 19940509
KR 302545 B	WO 1994-CA257 19940509
JP 3548175 B2	WO 1994-CA257 19940509
KR 302545 B	KR 1995-705019 19951110
BR 1100608 A3	BR 1997-1100608 19970513
JP 2004154586 A	JP 2003-432701 20031226

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 690113 B	Previous Publ	AU 9466434 A
DE 69415974 E	Based on	EP 697896 A
ES 2131684 T3	Based on	EP 697896 A
JP 3548175 B2	Previous Publ	JP 08511696 W
KR 302545 B	Previous Publ	KR 96702326 A
AU 9466434 A	Based on	WO 9426321 A
EP 697896 A1	Based on	WO 9426321 A
BR 9406647 A	Based on	WO 9426321 A
JP 08511696 W	Based on	WO 9426321 A
AU 690113 B	Based on	WO 9426321 A
EP 697896 B1	Based on	WO 9426321 A
DE 69415974 E	Based on	WO 9426321 A
KR 302545 B	Based on	WO 9426321 A
JP 3548175 B2	Based on	WO 9426321 A

PRIORITY APPLN. INFO: US 1994-226345 19940412
US 1993-58753 19930510

AN 1995-006371 [199501] WPIX

CR 1998-582600; 1999-189526; 2004-639589

AB WO 1994026321 A1 UPAB: 20050701

Bioactive conjugate adapted to coat a metal implant outer surface of formula (I) is claimed -R-X-P (I) R = O or S adapted to be covalently attached to the implant surface. X = a bond; 1-30 membered opt. branched chain containing at least C N O Si and/or S; and or 1-20 membered rings containing at least C, N, O, Si and/or S; and P = a bioactive molecule moiety which promotes tissue growth , stabilisation and integration, and which retains its biological activity. Also claimed is a process for covalent coating of implants with a bioactive conjugate comprising: (a) cleaning contaminants from the surface; opt. (b) deoxidising in a medium; and (c) controlled reoxidn. of the surface; and (d) contacting the implant surface with the above bioactive conjugate under conditions causing covalent coating of the implant surface.

USE - The bioactive conjugate promotes tissue growth, stabilisation and integration and retains its biological activity and improves integration of the implant into surrounding tissues. The conjugate also protects the implant against oxidation and provides a flexible and resilient coating on the implant helping to absorb the forces applied to the implant helping to prevent lesions and fractures of the tissue at the tissue implant interface. The conjugates also provide better attachment of the implant at soft tissue (epithelial cells) or hard tissue (bone) site.

L12 ANSWER 173 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1993-351314 [199344] WPIX
CROSS REFERENCE: 1992-007161; 1996-048859
DOC. NO. NON-CPI: N1993-271057 [199344]
TITLE: Glaucoma implant to minimise risk of damage - has elastomeric plate with non-valved elastomeric drainage tube and plate is curved to conform to eye
DERWENT CLASS: P32; P34
INVENTOR: BAERVELDT G; BLAKE L W; WRIGHT G M
PATENT ASSIGNEE: (IOVI-N) IOVISION INC
COUNTRY COUNT: 18

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9320783	A1	19931028	(199344)*	EN	21[6]		<--
							<--
US 5397300	A	19950314	(199516)	EN	10[6]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9320783 A1		WO 1993-US3225	19930406
US 5397300 A	CIP of	US 1990-531010	19900531
US 5397300 A	Cont of	US 1992-867995	19920413
US 5397300 A	Cont of	US 1993-157333	19931123
US 5397300 A		US 1994-231988	19940421

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 5397300 A	CIP of	US 5178604 A

PRIORITY APPLN. INFO: US 1992-867995 19920413
US 1990-531010 19900531
US 1993-157333 19931123
US 1994-231988 19940421

AN 1993-351314 [199344] WPIX
CR 1992-007161; 1996-048859
AB WO 1993020783 A1 UPAB: 20060108
The implant has a through hole (54) positioned centrally in a plate (40) and it is sized to allow scar tissue to go through it. An elastomeric drainage tube (42) is attached to the plate. It has two ends (46, 48), the first end (46) opening onto the surface of the plate.
The second end (48) extends for connection to the eye (12). This gives a fluid communication between the eye and one of the plate surfaces.
ADVANTAGE - Reduces trauma to eye.

Member(0002)
ABEQ US 5397300 A UPAB 20060108
The implant for use in the treatment of glaucoma comprises an elastomeric plate having a non-valved elastomeric drainage tube attached thereto. The plate is elliptical in shape and curved so as to conform to the curvature of the eye. At least one hole is

made in the plate to facilitate the formation of a tethered scar tissue bubble, referred to a bleb, to form around the carrier plate. The scar tissue will grow through the hole or holes and pull the perimeter of the bubble towards the carrier plate at the hole locations to tether the formation of the bleb to the carrier plate and finally to the sclera tissue. The plate is inserted into the eye in an incision made in the Tenon's capsule and sutured to the sclera. The drainage tube is tunnelled through the Tenon's capsule and cornea and inserted into the anterior chamber, thus providing patent fluid communication between the anterior chamber and the elastomeric plate.

ADVANTAGE - The flexible structure of the plate allows the plate to be easily inserted, thus reducing the surgical procedure length. In addition, the pliable material minimises the risk of damage and trauma to surrounding tissues in the insertion process.

L12 ANSWER 174 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1993-196087 [199324] WPIX
DOC. NO. CPI: C1993-086847 [199324]
DOC. NO. NON-CPI: N1993-150857 [199324]
TITLE: Tissue supporting implantable prosthesis - in which silicone cover exposes tissue ingrowth surface of core only at one end
DERWENT CLASS: A96; D22; P32
INVENTOR: BROTHER P D; COGGINS P R
PATENT ASSIGNEE: (COGG-I) COGGINS P R
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 5217494	A	19930608	(199324)*	EN	9[7]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5217494 A	CIP of	US 1989-296250	19890112
US 5217494 A		US 1991-681430	19910405

PRIORITY APPLN. INFO: US 1991-681430 19910405
US 1989-296250 19890112
AN 1993-196087 [199324] WPIX
AB US 5217494 A UPAB: 20050701
A prosthesis comprises a flexible woven fabric core (22) with an additional layer of tissue ingrowth material attached to the core and extending to one end. An outer cover layer (24) which resists tissue ingrowth encapsulates the core and additional layer completely except in the area of the tissue ingrowth surface where the cover has an opening.
The fabric is pref. of polyester, polyimide of fluorocarbon polymer, and the outer cover layer is of silicone which sealingly engages an object penetrating it. There are pref. spaced reinforcements extending perpendicular to the core axis to minimise torsional bending of the prosthesis.
USE/ADVANTAGE - Partic. to tighten or lift loose or sagging tissue in cosmetic surgical procedures, once implanted can be adjusted to tighten or lift tissue which has stretched after implantation.

L12 ANSWER 175 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1992-234384 [199228] WPIX
DOC. NO. CPI: C1992-105695 [199228]
DOC. NO. NON-CPI: N1992-178428 [199228]
TITLE: Guided tissue regeneration
article - used for periodontal or bone defects, nerve ending repair, or prevention of soft tissue adhesions
DERWENT CLASS: A96; B04; D21; D22; P31; P32; P34
INVENTOR: BUTLER M D; HARDWICK W R; HAYES B; HAYES B K; WHITE C F
PATENT ASSIGNEE: (GORE-C) GORE & ASSOC INC W L; (GORE-C) GORE & ASSOC W L
COUNTRY COUNT: 15

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 9210218	A1	19920625	(199228)*	EN	36[12]		<--
EP 560934	A1	19930922	(199338)	EN			<--
JP 06506366	W	19940721	(199433)	JA	12		<--
EP 560934	B1	19960821	(199638)	EN	20[12]		<--
DE 69121587	E	19960926	(199644)	DE			<--
EP 560934	B2	19991110	(199952)	EN			<--
US 6031148	A	20000229	(200018)	EN			<--
CA 2094908	C	20000208	(200027)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9210218 A1		WO 1991-US8972	19911202
US 6031148 A Div Ex		US 1990-622869	19901206
CA 2094908 C		CA 1991-2094908	19911202
DE 69121587 E		DE 1991-69121587	19911202
EP 560934 A1		WO 1991-US8972	19911202
JP 06506366 W		WO 1991-US8972	19911202
EP 560934 B1		WO 1991-US8972	19911202
DE 69121587 E		WO 1991-US8972	19911202
EP 560934 B2		WO 1991-US8972	19911202
CA 2094908 C		WO 1991-US8972	19911202
EP 560934 A1		EP 1992-902824	19911202
EP 560934 B1		EP 1992-902824	19911202
DE 69121587 E		EP 1992-902824	19911202
EP 560934 B2		EP 1992-902824	19911202
JP 06506366 W		JP 1992-502947	19911202
US 6031148 A		US 1993-42293	19930402

FILING DETAILS:

PATENT NO	KIND	PATENT NO

DE 69121587 E	Based on	EP 560934 A
EP 560934 A1	Based on	WO 9210218 A
JP 06506366 W	Based on	WO 9210218 A
EP 560934 B1	Based on	WO 9210218 A
DE 69121587 E	Based on	WO 9210218 A
EP 560934 B2	Based on	WO 9210218 A
CA 2094908 C	Based on	WO 9210218 A

PRIORITY APPLN. INFO: US 1990-622869 19901206
US 1993-42293 19930402

AN 1992-234384 [199228] WPIX

AB WO 1992010218 A1 UPAB: 20060107
An implantable bioabsorbable article, useful for separation and regeneration of mammalian tissue, comprises; (a) a bisabsorbable cell-barrier sheet material (BCBSM); and (b) a bisabsorbable fibrous matrix (BFM) laminarly fixed to one side of the BCBSM. The BFM allows ingrowth of tissue into it, and the BCBSM stops the passage and further ingrowth. The regeneration of tissue,on the other side of the BCBSM, is thereby separated from the ingrowth of tissue on the first side.
USE/ADVANTAGE - The article is used in guided tissue regeneration, allowing separation and isolation of the tissue to be regenerated from other tissues by means of the barrier. The rate of the biodegradation by can be controlled by variation in the polymer compsn. The material adds to the stability of healing wounds, has rigidity to ensure preservation of space next to a defect and has acceptable surgical handling properties and strength. The article is used in regeneration of periodontal tissue, repair of bone defects, prevention of adhesions in soft tissue, (partic. those in the peritoneum, including pelvic adhesions), and in repair of nerve ends. For this purpose, and for vascular repair, the article is made in the form of a tube. Opt. the article is impregnated with antibiotics, antimicrobials, growth factors, differentiation factors, and cell attachment factors if required, to aid in these purposes, and sutures can opt. be affixed. - .D

Member(0007)

ABEQ US 6031148 A UPAB 20060107
An implantable bioabsorbable article, useful for sepn. and regeneration of mammalian tissue, comprises; (a) a bisabsorbable cell-barrier sheet material (BCBSM); and (b) a bisabsorbable fibrous matrix (BFM) laminarly fixed to one side of the BCBSM. The BFM allows ingrowth of tissue into it, and the BCBSM stops the passage and further ingrowth. The regeneration of tissue,on the other side of the BCBSM, is thereby sepd. from the ingrowth of tissue on the first side.
USE/ADVANTAGE - The article is used in guided tissue regeneration, allowing sepn. and isolation of the tissue to be regenerated from other tissues by means of the barrier. The rate of the biodegradation by can be controlled by variation in the polymer compsn. The material adds to the stability of healing wounds, has rigidity to ensure preservation of space next to a defect and has acceptable surgical handling properties and strength. The article is used in regeneration of periodontal tissue, repair of bone defects, prevention of adhesions in soft tissue, (partic. those in the peritoneum, including pelvic adhesions), and in repair of nerve ends. For this purpose, and for vascular repair, the article is made in the form of a tube. Opt. the article is impregnated with antibiotics, antimicrobials, growth factors, differentiation factors, and

cell attachment factors if required, to aid in these purposes, and sutures can opt. be affixed. - .D

L12 ANSWER 176 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1989-070206 [198910] WPIX
DOC. NO. CPI: C1989-031166 [199321]
DOC. NO. NON-CPI: N1989-053596 [199321]
TITLE: Graft for repair of connective tissue - using crosslinked connective animal fibres in non-immobilised joint aligned along ingrowing fibrous cells
DERWENT CLASS: A96; D22; P32; P34
INVENTOR: CHVAPIL M
PATENT ASSIGNEE: (BIOP-N) BIO-PRODUCTS INC
COUNTRY COUNT: 12

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 306018	A	19890308	(198910)*	EN	18[8]		<--
							<--
US 5078744	A	19920107	(199205)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 306018	A	EP 1988-114262	19880901
US 5078744	A	US 1987-93018	19870904
US 5078744	A	US 1989-411230	19890922

PRIORITY APPLN. INFO: US 1987-93018 19870904
US 1989-411230 19890922
AN 1989-070206 [198910] WPIX
AB EP 306018 A UPAB: 20060105
A graft for repairing damaged connective tissue is made from long, thin animal fibres. These are crosslinked and held in a bundle where the fibres lie parallel and are implanted to provide a matrix for the growth of ingrowing fibrogenic cells and natural collagen.
The fibres are pref. bovine Achilles tendon fibres, 8-30 cm. long and 50-100 microns thick.
The fibres are pref. crosslinked using hexamethylenediisocyanate to produce a shrinkage temperature of 75-85 deg.C. This reduces antibody formation and allows only a preselected amount of water retention by the fibres to cause them to be more attractive to attachment of fibrogenic cells. The mechanical strength of the fibres is 4-8 kg/sq.mm. The compliance of the heterograft is the same as the damaged connective tissue to produce optimal stressing of the ingrowing tissue.
USE/ADVANTAGE - The graft is pref. applied to a joint which is not immobilised so that normal stress is applied while the new fibres grow. The graft has good association with the repair tissue but permits sliding of the new tendon material without adhesion to existing material.

Member(0002)
ABEQ US 5078744 A UPAB 20060105
Natural interior cruciate ligament tissue is regrown in place of damaged tissue of a joint. Process

comprises (a) crosslinking purified individual long thin connective animal tendon or ligament tissue fibres to a shrinkage temp. of 75-85 deg. C so that tensile strength of 4-8 kg per sq. mm. is obtd.; (b) forming an elongated heterograft of the fibres, by arranging fibres in close parallel relationship then positioning gps. obtd. in the direction of a longitudinal axis of heterograft, so that each extends from one end to the other; (c) replacing at least part of the damaged tissue with the heterograft, so that fibres are oriented in the same direction as natural fibres, to cause ingrowth of fibrogenic cells along the connective tissue fibres and host connective tissue by ingrowing fibrogenic cells; and (d) causing subject to repetitively apply normal stress to heterograft to align fibrogenic cells and natural collagen tissue produced.

ADVANTAGE - Growth of natural connective tissue is oriented and enhanced, and damaged tissue replaced. (14pp)

L12 ANSWER 177 OF 177 WPIX COPYRIGHT 2010 THOMSON REUTERS on STN
ACCESSION NUMBER: 1988-051470 [198808] WPIX
TITLE: Anchor for dental prosthesis - has cylindrical body with cavity having surrounding apertures for tissue growth
DERWENT CLASS: P32
INVENTOR: ROSS S E
PATENT ASSIGNEE: (ROSS-N) ROSS SYST CORP; (ROSS-N) ROSS SYSTEMS CORP
COUNTRY COUNT: 19

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 256708	A	19880224	(198808)*	EN	38[63]		<--
AU 8776780	A	19880218	(198815)	EN			<--
US 4738619	A	19880419	(198818)	EN	5		<--
DK 8704189	A	19880214	(198819)	DA			<--
BR 8704189	A	19880412	(198820)	PT			<--
US 4744753	A	19880517	(198822)	EN	12		<--
US 4744754	A	19880517	(198822)	EN	9		<--
US 4744755	A	19880517	(198822)	EN	9		<--
US 4744756	A	19880517	(198822)	EN	11		<--
US 4787848	A	19881129	(198850)	EN	8		<--
US 4820156	A	19890411	(198917)	EN	6		<--
CN 87105608	A	19880316	(198918)	ZH			<--
US 4886456	A	19891212	(199007)	EN	10		<--
DD 301980	A9	19941006	(199443)	DE			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 256708	A	EP 1987-306692	19870729
US 4738619	A	US 1986-876524	19860813
US 4744756	A	US 1986-876524	19860813
US 4744753	A	US 1986-876524	19860813
US 4744754	A	US 1986-876524	19860813
US 4744755	A	US 1986-876524	19860813
US 4787848	A	US 1986-876524	19860813
US 4820156	A	US 1986-876524	19860813
US 4886456	A	US 1986-876524	19860813
US 4738619	A	US 1986-896101	19860813
US 4744756	A	US 1986-896101	19860813
US 4744753	A	US 1986-896101	19860813
US 4744754	A	US 1986-896101	19860813
US 4744755	A	US 1986-896101	19860813
US 4787848	A	US 1986-896101	19860813
US 4820156	A	US 1986-896101	19860813
US 4886456	A	US 1986-896101	19860813
US 4738619	A	US 1986-896524	19860813
US 4744756	A	US 1986-896524	19860813
US 4744753	A	US 1986-896524	19860813
US 4744754	A	US 1986-896524	19860813
US 4744755	A	US 1986-896524	19860813
US 4787848	A	US 1986-896524	19860813
US 4820156	A	US 1986-896524	19860813
US 4886456	A	US 1986-896524	19860813
US 4738619	A	US 1986-920781	19861020
US 4744756	A	US 1986-920781	19861020
US 4744753	A	US 1986-920781	19861020
US 4744754	A	US 1986-920781	19861020
US 4744755	A	US 1986-920781	19861020
US 4787848	A	US 1986-920781	19861020
US 4820156	A	US 1986-920781	19861020
US 4886456	A	US 1986-920781	19861020
US 4738619	A	US 1986-920796	19861020
US 4744756	A	US 1986-920796	19861020
US 4744753	A	US 1986-920796	19861020
US 4744754	A	US 1986-920796	19861020
US 4744755	A	US 1986-920796	19861020
US 4787848	A	US 1986-920796	19861020
US 4820156	A	US 1986-920796	19861020
US 4886456	A	US 1986-920796	19861020
US 4738619	A	US 1986-934638	19861125
US 4744756	A	US 1986-934638	19861125
US 4744753	A	US 1986-934638	19861125
US 4744754	A	US 1986-934638	19861125
US 4744755	A	US 1986-934638	19861125
US 4787848	A	US 1986-934638	19861125
US 4820156	A	US 1986-934638	19861125
US 4886456	A	US 1986-934638	19861125
US 4738619	A	US 1986-934651	19861125
US 4744756	A	US 1986-934651	19861125
US 4744753	A	US 1986-934651	19861125
US 4744754	A	US 1986-934651	19861125
US 4744755	A	US 1986-934651	19861125

US 4787848 A US 1986-934651 19861125
US 4820156 A US 1986-934651 19861125
US 4886456 A US 1986-934651 19861125
US 4738619 A US 1986-947176 19861229
US 4744756 A US 1986-947176 19861229
US 4744753 A US 1986-947176 19861229
US 4744754 A US 1986-947176 19861229
US 4744755 A US 1986-947176 19861229
US 4787848 A US 1986-947176 19861229
US 4820156 A US 1986-947176 19861229
US 4886456 A US 1986-947176 19861229
DD 301980 A9 DD 1987-305968 19870812
US 4886456 A US 1988-192128 19880510

PRIORITY APPLN. INFO: US 1986-947176 19861229
US 1986-876524 19860813
US 1986-896101 19860813
US 1986-896524 19860813
US 1986-920781 19861020
US 1986-920796 19861020
US 1986-934638 19861125
US 1986-934651 19861125
US 1988-192128 19880510

AN 1988-051470 [198808] WPIX

AB EP 256708 A UPAB: 20060105
The dental anchor (10) has a cylindrical body which is open at a front end. This forms a cylindrical front cavity (14) communicating with the open end to receive a cylindrical bore core. The portion of the body surrounding the cavity has apertures (24) to accommodate growth of bone tissue.
The body has a rear cavity (16) which is internally threaded to receive externally threaded prosthesis attachments. The front and rear portions of the body include front and rear non-threaded outer peripheries (52,38).
ADVANTAGE - Reduced installation trauma.

Member(0003)

ABEQ US 4738619 A UPAB 20060105
A transparent transfer sheet carries on a first side removable pictorial representations of dental anchors of different sizes. The transfer sheet is superimposed over an x-ray to position different ones of the pictorial representations over a site of the x-ray where a dental implant is to be installed. When a pictorial representation of desired size has been selected, a second side of the transfer sheet opposite the selected pictorial representation is rubbed in order to transfer the selected pictorial representation onto the x-ray.
Each of the pictorial representations includes indicia indicative of a dimension of the associated anchor.
The pictorial representations are magnified in size relative to the x-ray to provide a factor of safety.
USE - Selection of a dental anchor for insertion into a jaw bone of a patient. - (5pp)

Member(0006)

ABEQ US 4744753 A UPAB 20060105
The dental prosthesis is formed by attaching an internally threaded sleeve to a post by heat-meltable material. A dimensionally stable, heat-meltable material is applied to the post and around the sleeve. The heat-meltable materials are melted and replaced by a permanent material. A screw is inserted into the sleeve prior to the melting step.

The melting and replacing steps comprise steps in an investment-type casting procedure where a unit comprised of the post, the sleeve, the screw, and the heat-meltable materials is embedded in an investment material such that a head of the screw is embedded in the investment material to maintain the positional relationship of the sleeve relative to the post during the melting step. A release material is applied over a body defined by the permanent material and fusible material is cast over this.

ADVANTAGE - Reduced gap between bridge and gum. - (12pp)

Member(0007)
ABEQ US 4744754 A UPAB 20060105

The dental implant comprises a cylindrical body defining a longitudinal axis and including an outer periphery. The body is opened at a front end and includes a front cylindrical cavity for receiving a cylindrical bore core. Through holes are formed in the body and communicated with the front cavity to accommodate the growth of bone tissue therethrough. The body is opened at a rear end and includes a rear cavity communicating with the open rear end for receiving a prosthesis-attachment . The outer periphery of the body can be cylindrically smooth or may include longitudinally spaced, circumferentially disposed ribs. There are thus defined, on the outer periphery, circumferentially continuous surface regions adapted to engage the wall of the bore in the bone to resist the flow of blood past the implant.

ADVANTAGE - Improves regeneration of bone tissue . - (9pp)

Member(0008)
ABEQ US 4744755 A UPAB 20060105

The dental implant is installed in a predrilled bore formed in jaw bone tissue for retaining a dental prosthesis. The implant comprises a cylindrical body defining a longitudinal axis and including an outer periphery. The body is open at a front end and includes a front cylindrical cavity for receiving a cylindrical bone core. Through holes are formed in the body and communicate with the front cavity to accommodate the growth of bone tissue. The body is open at a rear end thereof and includes a rear cavity communicating with the open rear end for receiving a prosth

Member(0009)
ABEQ US 4744756 A UPAB 20060105

The titanium pin is adapted to be formed with a dental prosthesis and mounted within a preinstalled dental anchor in a patient's jaw. The pin is of one-piece construction and comprises a flange, an externally threaded stem, and a post. The stem is externally threaded and projects from a first side of the flange. The post is of non-circular cross-section and longitudinally irregular profile and projects from a second side of the flange.

The stem is adapted to be threaded into an anchor, and the post is adapted to be properly shaped and then receive a cast body. An overlay is releasably mountable upon the cast body by a removable screw.

ADVANTAGE - Ease of repair.

Member(0010)
ABEQ US 4787848 A UPAB 20060105

A bore is formed in the jaw bone of a patient by a trephine drill having a hollow head. A pilot hole is initially drilled in the jaw bone

and a guide bushing is installed in the pilot hole. Th drill head is inserted telescopingly over a guide portion of the bushing and is advanced into the bone until the drill head abuts an end of the guide portion to terminate drill advancement.
The length of the bore is extended by advancing the drill further into the bone relative to a stop which is freely longitudinally slidably situated on the drill. When the stop becomes sandwiched between the jaw bone and a surface movable with a motor housing carrying the drill, it is assured that the desired bore depth has been obtained.
ADVANTAGE - Improved depth precision.

Member(0011)
ABEQ US 4820156 A UPAB 20060105
The dental trephine drill cuts a bore having a central core. The drill includes a shank having a fluid passage for conducting drilling fluid and a cutting head disposed at a front end of the shank. The cutting head includes front and side faces. The end face surrounds a central hole and includes end cutting edges extending from the hole to an outer periphery of the end face.
The side face includes longitudinal grooves, a longitudinal edge of which defines a side cutting edge. An aperture in each groove communicates the grooves with the interior of the head for conducting drilling fluid into the grooves to cool the drill head and bone tissue.
USE - Dental trephine drill which cuts a bore but leaves a central protruding stub.

Member(0013)
ABEQ US 4886456 A UPAB 20060105
A dental prosthesis is formed by attaching an internally threaded sleeve to a post by a heat-meltable material. A dimensionally stable, heat-meltable material is applied to the post and around the sleeve. The heat-meltable materials are melted and replaced by a permanent material. A screw is inserted into the sleeve prior to the melting step. The melting and replacing steps comprise steps in an investment-type casting procedure.
A unit comprised of the post, the sleeve, the screw and the heat-meltable materials is embedded in an investment material such that a head of the screw is embedded in the investment material to maintain the positional relationship of the sleeve relative to the post during the melting step. A release material is applied over a body defined by the permanent material. A dimensionally stable, heat-meltable material is applied over the release material and is melted and replaced with a permanent material which forms an overlay capable of being removed upon removal of the screw.
USE - Formation of dental prosthesis and attachment to the jaw of a patient.

SEARCH HISTORY

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     (FILE 'HOME' ENTERED AT 10:51:35 ON 01 JUL 2010)

     FILE 'BIOSIS, BIOTECHNO, BIOTECHDS, DISSABS, EMBASE, ESBIOBASE, LIFESCI,
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                ACT SRI698L29/A
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L1   (      2733)SEA ABB=ON  L1
L2   (      2733)SEA ABB=ON  L1 AND ?IMPLANT?
L3   (      2600)SEA ABB=ON  L2 AND (L1 OR ?BIOPOLYMER? OR ?POLYGLYCOLAT? OR
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L4   (       482)SEA ABB=ON  L3 AND (?SHEATH? OR ?ENGAG?(6A) ?MATRIX? OR
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                    OR ?CONTROL? OR ?LIMIT?))
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L7   (       254)SEA ABB=ON  L5 OR L6
L8   (       245)SEA ABB=ON  L7 AND ?TISSUE?(4A)(?GROW? OR ?INCREAS? OR
                    ?DEVELOP? OR ?PRODUC?)
L9(        235)SEA L8 AND (?POLYMER?(W) ?MATRIX? OR ?CELL?(6A) ?POSITION? OR
L10(        65)SEA L9 AND (?GENERAT? OR ?DAMAG?)(4A)(?NERV? OR ?TISSUE?)
L11(       235)SEA L9 OR L10
L12         177 SEA ABB=ON  L11 AND (CELL? OR ?BLAST? OR ?CYTE? OR ?SECRET? OR
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